11-281

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From: Romeo, David
Sent: Tuesday, November 10, 1998 8:00 AM
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Subject: 08/945,459

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Requester's Name: ... David Romeo
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 Date of Request: ... 10 November 1998
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*                   W E L C O M E   T O   T H E                *
*             U. S.   P A T E N T   T E X T   F I L E          *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

=> s mp52 or (mp 52) or gdf5 or (gdf 5) or ((growth(1a)differentiation)(w)factor(w)5)

            14 MP52
         29697 MP
        831400 52
           347 MP 52
                 (MP(W)52)
             0 GDF5
           142 GDF
       2247558 5
             4 GDF 5
                 (GDF(W)5)
        142295 GROWTH
         21751 DIFFERENTIATION
        257110 FACTOR
       2247558 5
             1 (GROWTH(1A)DIFFERENTIATION)(W)FACTOR(W)5
L1         363 MP52 OR (MP 52) OR GDF5 OR (GDF 5) OR ((GROWTH(1A)DIFFERENT
IAT
               ION)(W)FACTOR(W)5)

=> s l1 and (530, 435, 514/cor)

             0 530, 435, 514/COR
L2           0 L1 AND (530, 435, 514/COR)

=> s l1 and (530, 435, 514/clas)

             0 530, 435, 514/CLAS
L3           0 L1 AND (530, 435, 514/CLAS)

=> s l1 and (530 or 435 or 514/clas)

         35688 530
         18229 435
         78209 514/CLAS
L4         178 L1 AND (530 OR 435 OR 514/CLAS)

=> s mp52 or gdf5 or gdf3 or ((gdf or ((growth(1a)differentiation)(w)factor))(w)(3 or 5))

            14 MP52
             0 GDF5
             8 GDF3
           142 GDF
        142295 GROWTH
         21751 DIFFERENTIATION
        257110 FACTOR
       2352580 3
       2247558 5
            11 (GDF OR ((GROWTH(1A)DIFFERENTIATION)(W)FACTOR))(W)(3 OR 5)
L5          33 MP52 OR GDF5 OR GDF3 OR ((GDF OR ((GROWTH(1A)DIFFERENTIATIO
N)(
               W)FACTOR))(W)(3 OR 5))

=> d bib ab 1- …
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US PAT NO: 5,830,761 [IMAGE AVAILABLE] L5: 1 of 33
DATE ISSUED: Nov. 3, 1998
TITLE: Medium and methods for culturing mammalian cho cells
INVENTOR: Denis Drapeau, Salem, NH
S. Robert Adamson, Chelmsford, MA
Yen-Tung Luan, Chelmsford, MA
Paul Thoday, Sterling, MA
ASSIGNEE: Genetics Institute, Inc., Cambridge, MA (U.S. corp.)
APPL-NO: 08/481,774
DATE FILED: Jun. 7, 1995
ART-UNIT: 161
PRIM-EXMR: Leon B. Lankford, Jr.
LEGAL-REP: Steven R. Lazar

US PAT NO: 5,830,761 [IMAGE AVAILABLE] L5: 1 of 33

ABSTRACT:
Cell culture media are provided containing high L-cystine concentration and low L-glutamic acid concentration. The media are useful for recombinant production of proteins using mammalian cell cultures.

US PAT NO: 5,827,733 [IMAGE AVAILABLE] L5: 2 of 33
DATE ISSUED: Oct. 27, 1998
TITLE: Growth differentiation factor-8 (GDF-8) and polynucleotides encoding same
INVENTOR: Se-Jin Lee, Baltimore, MD
Alexandra C. McPherron, Baltimore, MD
ASSIGNEE: The Johns Hopkins University School of Medicine, Baltimore, MD (U.S. corp.)
APPL-NO: 08/525,596
DATE FILED: Oct. 29, 1995
ART-UNIT: 182
PRIM-EXMR: Elizabeth C. Kemmerer
LEGAL-REP: Fish & Richardson, P.C.

US PAT NO: 5,827,733 [IMAGE AVAILABLE] L5: 2 of 33

ABSTRACT:

Growth differentiation factor-8 (GDF-8) polypeptides, polynucleotides encoding GDF-8 polypeptides, and vectors and host cells containing GDF-8 encoding polynucleotides are provided.

US PAT NO: 5,821,805 [IMAGE AVAILABLE] L5: 3 of 33
DATE ISSUED: Oct. 13, 1998
TITLE: Charge pump circuit having different threshold biases of the transistors
INVENTOR: Toshikatsu Jinbo, Tokyo, Japan
ASSIGNEE: NEC Corporation, Tokyo, Japan (foreign corp.)
APPL-NO: 08/884,333
DATE FILED: Jun. 27, 1997
ART-UNIT: 286
PRIM-EXMR: Terry Cunningham
LEGAL-REP: Sughrue, Mion, Zinn, Macpeak & Seas, PLLC

US PAT NO: 5,821,805 [IMAGE AVAILABLE] L5: 3 of 33

ABSTRACT:
In a charge pump circuit having a plurality of transistors connected in a diode configuration, the threshold voltage of the transistors are prevented from being increased due to a back-bias effect by having the threshold biases of the transistors adjusted. The circuit, therefore, ensures a desired voltage boosting ability.

US PAT NO: 5,821,056 [IMAGE AVAILABLE] L5: 4 of 33
DATE ISSUED: Oct. 13, 1998
TITLE: Growth differentiation factor-9
INVENTOR: Se-Jin Lee, Baltimore, MD
ASSIGNEE: The Johns Hopkins University School of Medicine, Baltimore, MD (U.S. corp.)
APPL-NO: 08/491,835
DATE FILED: Oct. 23, 1995
ART-UNIT: 182
PRIM-EXMR: Elizabeth C. Kemmerer
LEGAL-REP: Fish & Richardson, P.C.

US PAT NO: 5,821,056 [IMAGE AVAILABLE] L5: 4 of 33

ABSTRACT:

Growth differentiation factor-9 (GDF-9) is disclosed along with its polynucleotide sequence and amino acid sequence. Also disclosed are diagnostic and therapeutic methods of using the GDF-9 polypeptide and polynucleotide sequences.

US PAT NO: 5,817,622 [IMAGE AVAILABLE] L5: 5 of 33
DATE ISSUED: Oct. 6, 1998
TITLE: Method for providing trophic support for neurons comprising administering neurturin
INVENTOR: Eugene M. Johnson, Jr., St. Louis, MO
Jeffrey D. Milbrandt, St. Louis, MO
Paul T. Kotzbauer, St. Louis, MO
Patricia A. Lampe, St. Louis, MO
ASSIGNEE: Washington University, St. Louis, MO (U.S. corp.)
APPL-NO: 08/777,019
DATE FILED: Dec. 30, 1996
ART-UNIT: 166
PRIM-EXMR: Stephen Walsh
ASST-EXMR: Michael Pak
LEGAL-REP: Howell & Haferkamp, LC

US PAT NO: 5,817,622 [IMAGE AVAILABLE] L5: 5 of 33

ABSTRACT:
A novel growth factor, neurturin, is disclosed. The human and mouse amino acid sequences have been identified. Human and mouse neurturin genomic DNA sequences have been cloned and sequences and the respective cDNA sequences identified. The subcloning into vectors and the preparation of cells stably transformed with the vectors is also disclosed. In addition, methods for treating degenerative conditions using neurturin, methods for detecting gene alterations and methods for detecting and monitoring patient levels of neurturin are provided. Methods for identifying additional members of the neurturin-GDNF family of growth factors are also provided.

US PAT NO: 5,808,007 [IMAGE AVAILABLE] L5: 6 of 33
DATE ISSUED: Sep. 15, 1998
TITLE: **Growth** **differentiation** **factor**-**3**
INVENTOR: Se-Jin Lee, Baltimore, MD
Alexandra C. McPherron, Baltimore, MD
ASSIGNEE: The Johns Hopkins University School of Medicine, Baltimore, MD (U.S. corp.)
APPL-NO: 08/481,377
DATE FILED: Aug. 28, 1995
ART-UNIT: 182
PRIM-EXMR: Elizabeth C. Kemmerer
LEGAL-REP: Fish & Richardson, P.C.

US PAT NO: 5,808,007 [IMAGE AVAILABLE] L5: 6 of 33

ABSTRACT:

Growth **Differentiation** **factor**-**3** (**GDF**-**3**) is disclosed along with its polynucleotide sequence and amino acid sequence. Also disclosed are diagnostic and therapeutic methods of using the **GDF**-**3** polypeptide and polynucleotide sequences.

US PAT NO: 5,807,713 [IMAGE AVAILABLE] L5: 7 of 33
DATE ISSUED: Sep. 15, 1998
TITLE: DNA encoding growth/differentiation factor
INVENTOR: Gertrud Hotten, Bochum, Federal Republic of Germany
Helge Neidhardt, Marburg, Federal Republic of Germany
Rolf Bechtold, Heidelberg, Federal Republic of Germany
Jens Pohl, Hambrucken, Federal Republic of Germany
ASSIGNEE: Biopharm Gesellschaft zur Biotechnologischen Entwicklung, Heidelberg, Federal Republic of Germany (foreign corp.)
APPL-NO: 08/482,577
DATE FILED: Jun. 7, 1995
ART-UNIT: 182
PRIM-EXMR: John Ulm
ASST-EXMR: Prema Mertz
LEGAL-REP: Nikaido Marmelstein Murray & Oram LLP

US PAT NO: 5,807,713 [IMAGE AVAILABLE] L5: 7 of 33

ABSTRACT:
The invention concerns a protein of the TGF-.beta. family, the DNA coding therefor and a pharmaceutical composition containing such a protein.

US PAT NO: 5,807,708 [IMAGE AVAILABLE] L5: 8 of 33
DATE ISSUED: Sep. 15, 1998
TITLE: Conservin nucleic acid molecules and compositions
INVENTOR: Dean A. Falb, Wellesley, MA
Carlos J. Gimeno, Boston, MA
ASSIGNEE: Millennium Pharmaceuticals, Inc., Cambridge, MA (U.S. corp.)
APPL-NO: 08/688,609
DATE FILED: Jul. 30, 1996
ART-UNIT: 182
PRIM-EXMR: Stephen Walsh
ASST-EXMR: Claire M. Kaufman
LEGAL-REP: Lahive & Cockfield, LLP

US PAT NO: 5,807,708 [IMAGE AVAILABLE] L5: 8 of 33

ABSTRACT:
The present invention relates to the discovery of novel conservin genes and polypeptides. Therapeutics, diagnostics and screening assays based on these molecules are also disclosed.

US PAT NO: 5,802,373 [IMAGE AVAILABLE] L5: 9 of 33
DATE ISSUED: Sep. 1, 1998
TITLE: Method for providing a pipeline interpreter for a variable length instruction set
INVENTOR: John S. Yates, Needham, MA
Stephen C. Root, Westboro, MA
ASSIGNEE: Digital Equipment Corporation, Maynard, MA (U.S. corp.)
APPL-NO: 08/592,982
DATE FILED: Jan. 29, 1996
ART-UNIT: 274
PRIM-EXMR: Emanuel Todd Voeltz
ASST-EXMR: Peter J. Corcoran, III
LEGAL-REP: Diane C. Drozenski, Ronald C. Hudgens

US PAT NO: 5,802,373 [IMAGE AVAILABLE] L5: 9 of 33

ABSTRACT:
A computer system for executing a binary image conversion system which converts instructions from a instruction set of a first, non native computer system to a second, different, native computer system, includes an run-time system which in response to a non-native image of an application program written for a non-native instruction set provides an native instruction or a native instruction routine. The run-time system collects profile data in response to execution of the native instructions to determine execution characteristics of the non-native instruction. Thereafter, the non-native instructions and the profile statistics are fed to a binary translator operating in a background mode and which is responsive to the profile data generated by the run-time system to form a translated native image. The run-time system and the binary translator are under the control of a server process. The non-native image is executed in two different enviroments with first portion executed as an interpreted image and remaining portions as a translated image. The run-time system includes an interpreter which is capable of handling condition codes corresponding to the non-native architecute. A technique is also provided to jacket calls between the two execution enviroments and to support object based services. Preferred techniques are also provide to determine interprocedural translation units. Further, intermixed translation/optimization techniques are discussed.

US PAT NO: 5,801,014 [IMAGE AVAILABLE] L5: 10 of 33
DATE ISSUED: Sep. 1, 1998
TITLE: **Growth** **differentiation** **factor**-**5**
INVENTOR: Se-Jin Lee, Baltimore, MD
Thanh Huynh, Baltimore, MD
ASSIGNEE: The Johns Hopkins University School of Medicine, Baltimore, MD (U.S. corp.)
APPL-NO: 08/455,559
DATE FILED: May 31, 1995
ART-UNIT: 182
PRIM-EXMR: Elizabeth C. Kemmerer
ASST-EXMR: David S. Romeo
LEGAL-REP: Fish & Richardson, P.C.

US PAT NO: 5,801,014 [IMAGE AVAILABLE] L5: 10 of 33

ABSTRACT:
Growth **differentiation** **factor**-**5** (**GDF**-**5**) is disclosed along with its polynucleotide sequence and amino acid sequence. Also disclosed are diagnostic and therapeutic methods of using the **GDF**-**5** polypeptide and polynucleotide sequences.

US PAT NO: 5,774,620 [IMAGE AVAILABLE] L5: 11 of 33
DATE ISSUED: Jun. 30, 1998
TITLE: Fluoride glass fiber
INVENTOR: Yoshiki Nishida, Mito, Japan
Terutoshi Kanamori, Mito, Japan
Tadashi Sakamoto, Yokosuka, Japan
Yasutake Ohishi, Mito, Japan
Shoichi Sudo, Mito, Japan
ASSIGNEE: Nippon Telegraph and Telephone Corporation, Tokyo, Japan (foreign corp.)
APPL-NO: 08/788,385
DATE FILED: Jan. 24, 1997
ART-UNIT: 251
PRIM-EXMR: John Ngo
LEGAL-REP: Spencer & Frank

US PAT NO: 5,774,620 [IMAGE AVAILABLE] L5: 11 of 33

ABSTRACT:
This invention relates to fluoride glass with a specific composition having wide infrared transmission. A fluoride optical fiber using this fluoride glass can give high efficiency with a low loss. The fluoride optical fiber having a second cladding on the outer periphery of a first cladding can adjust the refractive index of the first cladding suitably.

US PAT NO: 5,770,444 [IMAGE AVAILABLE] L5: 12 of 33
DATE ISSUED: Jun. 23, 1998
TITLE: Growth differentiation factor-6
INVENTOR: Se-Jin Lee, Baltimore, MD
Thanh Huynh, Baltimore, MD
ASSIGNEE: The Johns Hopkins University School of Medicine, Baltimore, MD (U.S. corp.)
APPL-NO: 08/581,529
DATE FILED: Apr. 15, 1996
ART-UNIT: 182
PRIM-EXMR: Elizabeth C. Kemmerer
LEGAL-REP: Fish & Richardson, P.C.

US PAT NO: 5,770,444 [IMAGE AVAILABLE] L5: 12 of 33

ABSTRACT:

Growth differentiation factor-6 (GDF-6) polypeptides, polynucleotides

encoding GDF-6 polypeptides, and vectors and host cells containing GDF-6 encoding polynucleotides are provided.

US PAT NO: 5,747,655 [IMAGE AVAILABLE] L5: 13 of 33
DATE ISSUED: May 5, 1998
TITLE: Neurturin and related growth factors
INVENTOR: Eugene M. Johnson, Jr., St. Louis, MO
Jeffrey D. Milbrandt, St. Louis, MO
Paul T. Kotzbauer, St. Louis, MO
Patricia A. Lampe, St. Louis, MO
ASSIGNEE: Washington University, St. Louis, MO (U.S. corp.)
APPL-NO: 08/742,035
DATE FILED: Nov. 1, 1996
ART-UNIT: 182
PRIM-EXMR: Stephen Walsh
ASST-EXMR: Michael Pak
LEGAL-REP: Howell & Haferkamp, L.C.

US PAT NO: 5,747,655 [IMAGE AVAILABLE] L5: 13 of 33

ABSTRACT:
A novel growth factor, neurturin, is disclosed. The human and mouse amino acid sequences have been identified. Human and mouse neurturin genomic DNA sequences have been cloned and sequences and the respective cDNA sequences identified. The subcloning into vectors and the preparation of cells stably transformed with the vectors is also disclosed. In addition, methods for treating degenerative conditions using neurturin, methods for detecting gene alterations and methods for detecting and monitoring patient levels of neurturin are provided. Methods for identifying additional members of the neurturin-GDNF family of growth factors are also provided.

US PAT NO: 5,739,307 [IMAGE AVAILABLE] L5: 14 of 33
DATE ISSUED: Apr. 14, 1998
TITLE: Polynucleotide encoding neurturin neurotrophic factor
INVENTOR: Eugene M. Johnson, Jr., St. Louis, MO
Jeffrey D. Milbrandt, St. Louis, MO
Paul T. Kotzbauer, St. Louis, MO
Patricia A. Lampe, St. Louis, MO
ASSIGNEE: Washington University, St. Louis, MO (U.S. corp.)
APPL-NO: 08/519,777
DATE FILED: Aug. 28, 1995
ART-UNIT: 182
PRIM-EXMR: Stephen Walsh
ASST-EXMR: Michael D. Pak
LEGAL-REP: Howell & Haferkamp, L.C.

US PAT NO: 5,739,307 [IMAGE AVAILABLE] L5: 14 of 33

ABSTRACT:
A novel growth factor, neurturin, is disclosed. The human and mouse amino acid sequences have been identified. Human and mouse neurturin genomic DNA sequences have been cloned and sequences and the respective cDNA sequences identified. The subcloning into vectors and the preparation of cells stably transformed with the vectors is also disclosed. In addition, methods for treating degenerative conditions using neurturin, methods for detecting gene alterations and methods for detecting and monitoring patient levels of neurturin are provided. Methods for identifying additional members of the neurturin-GDNF family of growth factors are also provided.

US PAT NO: 5,733,121 [IMAGE AVAILABLE] L5: 15 of 33
DATE ISSUED: Mar. 31, 1998
TITLE: Mandible lock device
INVENTOR: MacDonald H. Goode, P.O. Box 172, Southfield, MI 48037
APPL-NO: 08/827,947
DATE FILED: May 1, 1997
ART-UNIT: 333
PRIM-EXMR: Nicholas D. Lucchesi
LEGAL-REP: Robert A. Spray, Patent Attorney

US PAT NO: 5,733,121 [IMAGE AVAILABLE] L5: 15 of 33

ABSTRACT:
A lock device for holding "open" position of a person's mandible (lower) jaw bone, for facilitating medical treatments such as emergency intubation and other procedures, dental work, etc., particularly on a patient who is either unconscious or for some other reason is not cooperative.
A pair of force lugs, carried on support-beam members, are for imposing a force oppositely against a person's mandible teeth set and upper or skull (maxilla) teeth set. The beam members are pivotally interconnected; and have an extension arm outwardly and rearwardly extending from the outer end, being a retroflex member which in use of the device extends generally horizontally and rearwardly along the person's cheek, providing ease of manual grasping and other advantages.

US PAT NO: 5,728,679 [IMAGE AVAILABLE] L5: 16 of 33
DATE ISSUED: Mar. 17, 1998
TITLE: BMP-15 compositions
INVENTOR: Anthony J. Celeste, Hudson, MA
Jennifer L. Dube, Arlington, MA
Karen M. Lyons, Sherman Oaks, CA
Brigid Hogan, Brentwood, TN
ASSIGNEE: Genetics Institute, Inc., Cambridge, MA (U.S. corp.)
Vanderbilt University, Nashville, TN (U.S. corp.)
APPL-NO: 08/798,665
DATE FILED: Feb. 11, 1997
ART-UNIT: 184
PRIM-EXMR: Robert A. Wax
ASST-EXMR: Lisa J. Hobbs
LEGAL-REP: Steven R. Lazar, Thomas J. DesRosier

US PAT NO: 5,728,679 [IMAGE AVAILABLE] L5: 16 of 33

ABSTRACT:
Purified BMP-15-related proteins and processes for producing them are disclosed. DNA molecules encoding the BMP-15-related proteins are also disclosed. The proteins may be used in the treatment of bone and cartilage and/or other connective tissue defects and in wound healing and related tissue repair.

US PAT NO: 5,721,210 [IMAGE AVAILABLE] L5: 17 of 33
DATE ISSUED: Feb. 24, 1998
TITLE: Cyclic cell adhesion modulation compounds
INVENTOR: Thomas J. Lobl, Encinitas, CA
Shiu-Lan Chiang, San Diego, CA
Pina M. Cardarelli, Solana Beach, CA
ASSIGNEE: Tanabe Seiyaku Co., Ltd., Osaka, Japan (foreign corp.)
APPL-NO: 08/485,019
DATE FILED: Jun. 7, 1995
ART-UNIT: 181
PRIM-EXMR: Cecilia J. Tsang
ASST-EXMR: S. G. Marshall
LEGAL-REP: Fish & Richardson P.C.

US PAT NO: 5,721,210 [IMAGE AVAILABLE] L5: 17 of 33

ABSTRACT:
Cyclized integrin receptor antagonist compounds useful in modulating cell adhesion, including adhesion related to fibronectin, as well as leukocyte adhesion to endothelial cells, are disclosed. Methods for synthesizing, testing, formulating, and using the compounds as therapeutic agents are also disclosed.

US PAT NO: 5,700,774 [IMAGE AVAILABLE] L5: 18 of 33
DATE ISSUED: Dec. 23, 1997
TITLE: Compositions comprising bone morphogenic proteins and truncated parathyroid hormone related peptide, and methods of inducing cartilage by administration of same
INVENTOR: Gary Hattersley, Cambridge, MA
Vicki A. Rosen, Chestnut Hill, MA
ASSIGNEE: Genetics Institute, Inc., Cambridge, MA (U.S. corp.)
APPL-NO: 08/622,101
DATE FILED: Mar. 26, 1996
ART-UNIT: 181
PRIM-EXMR: David L. Fitzgerald
ASST-EXMR: Elizabeth C. Kemmerer
LEGAL-REP: M. C. Meinert, S. Lazar

US PAT NO: 5,700,774 [IMAGE AVAILABLE] L5: 18 of 33

ABSTRACT:
Compositions of proteins with chondrocyte and cartilaginous tissue inducing activity, as well as method of using those compositions, are disclosed. The compositions comprise one or more proteins of the transforming growth factor-.beta. (TGF-.beta.) superfamily of proteins, particularly bone morphogenetic proteins (BMPs), in combination with parathyroid hormone related polypeptide (PTHrP) or an equivalent PTH-like polypeptide. The compositions and methods are useful in the treatment of osteoarthritis, cartilage defects and in related tissue repair.

US PAT NO: 5,693,779 [IMAGE AVAILABLE] L5: 19 of 33
DATE ISSUED: Dec. 2, 1997
TITLE: Production and use of anti-dorsalizing morphogenetic protein
INVENTOR: Malcolm Moos, Jr., Bethesda, MD
Marie Krinks, Rockville, MD
Shouwen Wang, Rockville, MD
ASSIGNEE: The United States of America as represented by the Department of Health and Human Services, Washington, DC (U.S. govt.)
APPL-NO: 08/335,583
DATE FILED: Nov. 8, 1994
ART-UNIT: 181
PRIM-EXMR: Vasu S. Jagannathan
ASST-EXMR: David Romeo
LEGAL-REP: Knobbe, Martens, Olson & Bear, LLP

US PAT NO: 5,693,779 [IMAGE AVAILABLE] L5: 19 of 33

ABSTRACT:
An isolated polynucleotide of anti-dorsalizing morphogenetic protein (ADMP-1) is obtained from Xenopus. The protein is most closely related to human BMP-3. ADMP-1 functions as a modulator for dorsalizing influences, and prevents syndromes involving inappropriate proliferation of tissues.

US PAT NO: 5,658,882 [IMAGE AVAILABLE] L5: 20 of 33
DATE ISSUED: Aug. 19, 1997
TITLE: Methods of inducting formation of tendon and/or ligament tissue comprising administering BMP-12, BMP-13, and/or MP-52
INVENTOR: Anthony J. Celeste, Hudson, MA
John M. Wozney, Hudson, MA
Vicki A. Rosen, Brookline, MA
Neil M. Wolfman, Dover, MA
Gerald H. Thomsen, Port Jefferson, NY
Douglas A. Melton, Lexington, MA
ASSIGNEE: Genetics Institute, Inc., Cambridge, MA (U.S. corp.)
President and Fellows of Harvard College, Cambridge, MA (U.S. corp.)
APPL-NO: 08/362,670
DATE FILED: Dec. 22, 1994
ART-UNIT: 181
PRIM-EXMR: Vasu S. Jagannathan
ASST-EXMR: Elizabeth C. Kemmerer
LEGAL-REP: Steven R. Lazar, Thomas J. DesRosier

US PAT NO: 5,658,882 [IMAGE AVAILABLE] L5: 20 of 33

ABSTRACT:
The present invention relates to methods for the induction of tendon/ligament-like tissue formation, wound healing and ligament and other tissue repair, using a composition comprising BMP-12, BMP-13 or MP-52, or combinations of the above.

US PAT NO: 5,635,372 [IMAGE AVAILABLE] L5: 21 of 33
DATE ISSUED: Jun. 3, 1997
TITLE: BMP-15 compositions
INVENTOR: Anthony J. Celeste, Hudson, MA
Jennifer L. Dube, Arlington, MA
Karen M. Lyons, Sherman Oaks, CA
Brigid Hogan, Brentwood, TN
ASSIGNEE: Genetics Institute, Inc., Cambridge, MA (U.S. corp.)
Vanderbilt University, Nashville, TN (U.S. corp.)
APPL-NO: 08/446,924
DATE FILED: May 18, 1995
ART-UNIT: 184
PRIM-EXMR: Robert A. Wax
ASST-EXMR: Lisa J. Hobbs
LEGAL-REP: Steven R. Lazar, Thomas J. DesRosier

US PAT NO: 5,635,372 [IMAGE AVAILABLE] L5: 21 of 33

ABSTRACT:
Purified BMP-15-related proteins and processes for producing them are disclosed. DNA molecules encoding the BMP-15-related proteins are also disclosed. The proteins may be used in the treatment of bone and cartilage and/or other connective tissue defects and in wound healing and related tissue repair.

US PAT NO: 5,552,667 [IMAGE AVAILABLE] L5: 22 of 33
DATE ISSUED: Sep. 3, 1996
TITLE: Apparatus and method for generating photluminescence emission lines from rare-earth-element-doped CAF2 thin films over a SI-based substrate
INVENTOR: Chin-Chen Cho, Richardson, TX
Tsen H. Lin, Dallas, TX
Shou-Kong Fan, Richardson, TX
Walter M. Duncan, Dallas, TX
ASSIGNEE: Texas Instrument Incorporated, Dallas, TX (U.S. corp.)
APPL-NO: 08/426,413
DATE FILED: Apr. 17, 1995
ART-UNIT: 225
PRIM-EXMR: Sandra L. O'Shea
ASST-EXMR: Vip Patel
LEGAL-REP: Michael K. Skrehot, James C. Kesterson, Richard L. Donaldson

US PAT NO: 5,552,667 [IMAGE AVAILABLE] L5: 22 of 33

ABSTRACT:
A method and apparatus for producing photoluminescence emissions (68) from thin CaF.sub.2 films grown on either silicon or silicon/aluminum substrate shows narrow emission linewidth and high emission intensities for CaF.sub.2 with thickness as low as 0.7 .mu.m, The preferred embodiment is doped with a rare-earth such as Nd.

US PAT NO: 5,539,702 [IMAGE AVAILABLE] L5: 23 of 33
DATE ISSUED: Jul. 23, 1996
TITLE: Test apparatus for semi-conductor memory device
INVENTOR: Yeong-Chang Ahn, Seoul, Republic of Korea
ASSIGNEE: Goldstar Electron Co., Ltd., Choongchungbook-Do, Republic of Korea (foreign corp.)
APPL-NO: 08/195,069
DATE FILED: Feb. 14, 1994
ART-UNIT: 243
PRIM-EXMR: Robert W. Beausoliel, Jr.
ASST-EXMR: Phung M. Chung
LEGAL-REP: Lowe, Price, LeBlanc & Becker

US PAT NO: 5,539,702 [IMAGE AVAILABLE] L5: 23 of 33

ABSTRACT:
A test apparatus for a semi-conductor memory device comprising a memory section having a plurality of memory cell arrays, the memory cell arrays receiving input data in parallel, a latch control circuit responsive to a write enable signal and an address signal for outputting a control signal for latching the input data while the input data is written into the memory section, an expected data latch circuit responsive to the control signal from the latch control circuit and a read enable signal for latching the input data while the input data is written into the memory section and outputting the resultant expected data, a clock generator for generating a clock signal in response to a test flag signal and an internal column address select signal, an expected data transfer circuit for transferring the expected data from the expected data latch circuit in response to the test enable signal and the read enable signal, a data discrimination circuit for discriminating whether output data from the memory section are the same as the expected data from the expected data transfer circuit, and an output circuit for outputting a fail signal in response to output signals from the data discrimination circuit.

US PAT NO: 5,504,780 [IMAGE AVAILABLE] L5: 24 of 33
DATE ISSUED: Apr. 2, 1996
TITLE: Adaptive equalizer using self-learning neural network
INVENTOR: Joshua Alspector, Westfield, NJ
Timothy X. Brown, Mendham, NJ
Anthony Jayakumar, Somerset, NJ
ASSIGNEE: Bell Communications Research Inc., Livingston, NJ (U.S. corp.)
APPL-NO: 08/178,228
DATE FILED: Jan. 6, 1994
ART-UNIT: 262
PRIM-EXMR: Edward L. Coles, Sr.
ASST-EXMR: Madeleine Anh-Vinh Nguyen
LEGAL-REP: Leonard Charles Suchyta, James W. Falk

US PAT NO: 5,504,780 [IMAGE AVAILABLE] L5: 24 of 33

ABSTRACT:
A channel equalizer is formed using a self-learning neural network. During a training period, the neural network is taught the channel response function. The network is then used to equalize distortions introduced into signals by the channel. The neural network may be a Boltzmann Machine type of neural network comprising neurons arranged in an input layer, a hidden layer, and an output layer. The neurons are interconnected by bidirectional symmetric weighted synapses. Each neuron is preferably implemented by an analog integrated circuit. Direct communication between the input and output layers helps in faster channel acquisition. The scheme can very easily be extended to multilevel and multisymbol modulation schemes such as QAM and PSK.

US PAT NO: 5,480,845 [IMAGE AVAILABLE] L5: 25 of 33
DATE ISSUED: Jan. 2, 1996
TITLE: Fluorinated glasses
INVENTOR: Gwendael Maze, Saint Erblon, France
Marcel Poulain, Rennes, France
Jean-Yves Carre, Saint Erblon, France
Abdelouhed Soufiane, Casablanca, Morocco
Younes Messaddeq, Kenitra, Morocco
ASSIGNEE: Le Verre Fluore SA, France (foreign corp.)
APPL-NO: 08/425,214
DATE FILED: Apr. 18, 1995
ART-UNIT: 118
PRIM-EXMR: Mark L. Bell
ASST-EXMR: David Sample
LEGAL-REP: Laff, Whitesel, Conte & Saret, Ltd.

US PAT NO: 5,480,845 [IMAGE AVAILABLE] L5: 25 of 33

ABSTRACT:

Flourinated glasses containing indium fluoride and MF.sub.2 fluorides in at least 70 moles %, in which M denotes one or several elements of the group Ba, Sr, Ca, Pb. Said glasses contains, in the form of stabilizing elements, either 2 to 12 % gadolinium fluoride, or 2 to 10 % magnesium fluoride, or else a mixture of both fluorides in a proportion not exceeding 20 mole %. Variants of these compositions are also described.

US PAT NO: 5,475,698 [IMAGE AVAILABLE] L5: 26 of 33
DATE ISSUED: Dec. 12, 1995
TITLE: Light emission from rare-earth element-doped CaF.sub.2 thin films
INVENTOR: Chih-chen Cho, Richardson, TX
ASSIGNEE: Texas Instruments Incorporated, Dallas, TX (U.S. corp.)
APPL-NO: 08/324,637
DATE FILED: Oct. 18, 1994
ART-UNIT: 251
PRIM-EXMR: Leon Scott, Jr.
LEGAL-REP: Michael K. Skrehot, James C. Kesterson, Richard L. Donaldson

US PAT NO: 5,475,698 [IMAGE AVAILABLE] L5: 26 of 33

ABSTRACT:
By growing semi-insulating CaF.sub.2 films (296) on a silicon substrate (240), forming superlattice structures (260) made of CaF.sub.2 :Nd and other semiconductor layers (294) and by associating a co-dopant with Nd in the CaF.sub.2 films photoluminescence efficiency of CaF.sub.2 films is increased. This permits using electrons to produce photons and controlling optoelectronic devices using CaF.sub.2 films through voltage variation.

US PAT NO: 5,412,256 [IMAGE AVAILABLE] L5: 27 of 33
DATE ISSUED: May 2, 1995
TITLE: Neuron for use in self-learning neural network
INVENTOR: Joshua Alspector, Westfield, NJ
Anthony Jayakumar, Somerset, NJ
ASSIGNEE: Bell Communications Research, Inc., Livingston, NJ (U.S. corp.)
APPL-NO: 08/178,428
DATE FILED: Jan. 6, 1994
ART-UNIT: 259
PRIM-EXMR: Edward P. Westin
ASST-EXMR: Richard Roseen
LEGAL-REP: Leonard Charles Suchyta, Loria B. Yeadon

US PAT NO: 5,412,256 [IMAGE AVAILABLE] L5: 27 of 33

ABSTRACT:
A neuron for use in a self-learning neural network comprises a current input node at which a plurality of synaptic input currents are summed using Kirchoff's current law. The summed input currents are normalized using a coarse gain current normalizer. The normalized summed inputs current is then converted to a voltage using a current to voltage converter. This voltage is then amplified by a gain controlled cascode output amplifier. Gain control inputs are provided in the output amplifier so that the neuron can be settled by the Mean Field Approximation. A noise input stage is also connected to the output amplifier so that the neuron can be settled using simulated annealing. The resulting neuron is a variable gain, bi-directional current transimpedance neuron with a controllable noise input.

US PAT NO: 5,384,795 [IMAGE AVAILABLE] L5: 28 of 33
DATE ISSUED: Jan. 24, 1995
TITLE: Light emission from rare-earth element-doped CaF.sub.2 thin films by electroluminescence
INVENTOR: Chih-Chen Cho, Richardson, TX
ASSIGNEE: Texas Instruments Incorporated, Dallas, TX (U.S. corp.)
APPL-NO: 07/954,197
DATE FILED: Sep. 30, 1992
ART-UNIT: 251
PRIM-EXMR: Leon Scott, Jr.
LEGAL-REP: Michael K. Skrehot, James C. Kesterson, Richard L. Donaldson

US PAT NO: 5,384,795 [IMAGE AVAILABLE] L5: 28 of 33

ABSTRACT:
By growing semi-insulating CaF.sub.2 films (272) on a silicon substrate (240), forming superlattice structures (260) made of CaF.sub.2 :Nd and other semiconductor layers (294) and by associating a co-dopant with Nd in the CaF.sub.2 films photoluminescence efficiency of CaF.sub.2 films is increased. This permits using electrons to produce photons and controlling optoelectronic devices using CaF.sub.2 films through voltage variation.

US PAT NO: 5,369,657 [IMAGE AVAILABLE] L5: 29 of 33
DATE ISSUED: Nov. 29, 1994
TITLE: Silicon-based microlaser by doped thin films
INVENTOR: Chih-Chen Cho, Richardson, TX
Walter M. Duncan, Dallas, TX
ASSIGNEE: Texas Instruments Incorporated, Dallas, TX (U.S. corp.)
APPL-NO: 07/945,991
DATE FILED: Sep. 15, 1992
ART-UNIT: 251
PRIM-EXMR: Leon Scott, Jr.
LEGAL-REP: Michael K. Skrehot, James C. Kesterson, Richard L. Donaldson

US PAT NO: 5,369,657 [IMAGE AVAILABLE] L5: 29 of 33

ABSTRACT:
A silicon-based microlaser formed of rare-earth-doped CaF.sub.2 thin films has a a miniconductor substrate material (240) and a CaF.sub.2 film layers (234) grown on semiconductor substrate material (240). The CaF.sub.2 film layer (234) is doped with a predetermined amount of rare-earth-dopant that is sufficient to cause a spectral emission from the CaF.sub.2 film layer (234) having a narrow linewidth when the CaF.sub.2 film layer (234) is optically or electrically pumped.

US PAT NO: 5,306,385 [IMAGE AVAILABLE] L5: 30 of 33
DATE ISSUED: Apr. 26, 1994
TITLE: Method for generating photoluminescence emission lines from transition element doped CAF2 thin films over a Si-based substrate
INVENTOR: Chih-Chen Cho, Richardson, TX
Tsen H. Lin, Dallas, TX
Shou-Kong Fan, Dallas, TX
Walter M. Duncan, Dallas, TX
ASSIGNEE: Texas Instruments Incorporated, Dallas, TX (U.S. corp.)
APPL-NO: 07/954,136
DATE FILED: Sep. 30, 1992
ART-UNIT: 117
PRIM-EXMR: Olik Chaudhuri
ASST-EXMR: Rammamohan Rao Paladugu
LEGAL-REP: Michael K. Skrehot, James C. Kesterson, Richard L. Donaldson

US PAT NO: 5,306,385 [IMAGE AVAILABLE] L5: 30 of 33

ABSTRACT:
A method and apparatus for producing photoluminescence emissions (68) from thin CaF.sub.2 films grown on either silicon or silicon/aluminum substrate shows narrow emission linewidth and high emission intensities for CaF.sub.2 with thickness as low as 0.2 .mu.m. The preferred embodiment is doped with a rare-earth such as Nd.

US PAT NO: 5,305,273 [IMAGE AVAILABLE] L5: 31 of 33
DATE ISSUED: Apr. 19, 1994
TITLE: Semiconductor memory device
INVENTOR: Toshikatsu Jinbo, Tokyo, Japan
ASSIGNEE: NEC Corporation, Tokyo, Japan (foreign corp.)
APPL-NO: 07/942,606
DATE FILED: Sep. 10, 1992
ART-UNIT: 251
PRIM-EXMR: Eugene R. LaRoche
ASST-EXMR: A. Zarabian
LEGAL-REP: Sughrue, Mion, Zinn, Macpeak & Seas

US PAT NO: 5,305,273 [IMAGE AVAILABLE] L5: 31 of 33

ABSTRACT:
A semiconductor memory device has a matrix of memory cells interconnected by a plurality of column and row lines to form a channel between one of the column lines and a voltage source corresponding to a specified status. A sensing circuit connects or disconnects an output node where the current is supplied from the voltage source with the input node which indicates the status of the specified memory cell. A reference voltage generation circuit generates the reference voltage. A comparison circuit generates a signal to indicate the specified status of the selected memory cell. Between the output and input nodes of the sensing circuit, a first transistor under gate control by a reverse voltage of the input node voltage is connected and between the input node of the sensing circuit and the input node of the reference voltage generation circuit, a second transistor under gate control by the reverse voltage is also provided. The column line of the selected memory cell is charged by the voltage source of the sensing circuit via the first transistor and also by the voltage source of the reference voltage generation circuit via the second transistor.

US PAT NO: 5,301,149 [IMAGE AVAILABLE] L5: 32 of 33
DATE ISSUED: Apr. 5, 1994
TITLE: Data read-out circuit for semiconductor memory device
INVENTOR: Toshikatsu Jinbo, Tokyo, Japan
ASSIGNEE: NEC Corporation, Tokyo, Japan (foreign corp.)
APPL-NO: 07/871,102
DATE FILED: Apr. 20, 1992
ART-UNIT: 251
PRIM-EXMR: Joseph A. Popek
LEGAL-REP: Sughrue, Mion, Zinn, Mcpeak & Seas

US PAT NO: 5,301,149 [IMAGE AVAILABLE] L5: 32 of 33

ABSTRACT:
A data read-out circuit in the semiconductor memory device has a sense circuit which detects the state of a selected memory cell and outputs a sense output voltage, a reference voltage generating circuit which outputs a reference voltage, and a comparison amplifier which compares the sense output voltage with the reference voltage and outputs an output voltage. The data read-out circuit further has a reference voltage control circuit consisting of a P-channel MOSFET connected between a power supply source and an output node of the reference voltage generating circuit. A gate of the P-channel MOSFET receives the sense output voltage from the sense circuit. When the sense output voltage is a low level, the P-channel MOSFET becomes conductive and the reference output voltage is changed to a high level substantially equal to the power supply voltage and, when the sense output voltage is a high level, the P-channel MOSFET becomes non-conductive and the reference output voltage is changed to a low level substantially equal to the ground potential. Therefore, the data read-out circuit has a wide operation margin and operates in low power consumption.

US PAT NO: 5,039,886 [IMAGE AVAILABLE] L5: 33 of 33
DATE ISSUED: Aug. 13, 1991
TITLE: Current mirror type level converters
INVENTOR: Kazuyuki Nakamura, Tokyo, Japan
Masahide Takada, Tokyo, Japan
ASSIGNEE: NEC Corporation, Tokyo, Japan (foreign corp.)
APPL-NO: 07/528,550
DATE FILED: May 25, 1990
ART-UNIT: 254
PRIM-EXMR: Stanley D. Miller
ASST-EXMR: Margaret Rose Wambach
LEGAL-REP: Whitham & Marhoefer

US PAT NO: 5,039,886 [IMAGE AVAILABLE] L5: 33 of 33

ABSTRACT:
A current mirror type level converter which makes it unnecessary to prepare the complementary signals of input signals by connecting a load transistor which is in the normally energized state regardless of the states of the input signals to the side where a mirror current flows and the load transistor also determines the output level. Further, a mirror input current is caused to flow by the result of a logic operation of the input signals, a mirror current supplying transistor is shared among a plurality of current mirror type level converters, an output signal is fed back positively accompanying a delay, and a feedback transistor to whose control terminal is applied the positive feedback signal is connected in parallel with the load transistor in order to realize an increase in the speed of the operation of the converter.

=> s mp 52

29697 MP
831400 52
L6 347 MP 52
(MP(W)52)

=> s l6 and (435/69-70/cclst or 530/350-399/cclst or 514/12/cclst)

'435/69' IS NOT A RECOGNIZED CLASS/SUBCLASS VALUE FOR RANGE SEARCHING.
'435/70' IS NOT A RECOGNIZED CLASS/SUBCLASS VALUE FOR RANGE SEARCHING.

=> s l6 and (435/69.1-69.7/cclst or 530/350-399/cclst or 514/12/cclst)

4833 435/69.1-69.7/CCLST (9 TERMS)
(435/69.1+NEXT8/CCLST)
12004 530/350-399/CCLST (86 TERMS)
(530/350+NEXT85/CCLST)
1964 514/12/CCLST
L7 5 L6 AND (435/69.1-69.7/CCLST OR 530/350-399/CCLST OR 514/12/CCL
ST)

=> s l6 and (435 or 530 or 514 or 424)/clas

43584 435/CLAS
21671 530/CLAS
78209 514/CLAS
43781 424/CLAS
L8 171 L6 AND (435 OR 530 OR 514 OR 424)/CLAS

=> d his

(FILE 'USPAT' ENTERED AT 08:02:22 ON 10 NOV 1998)
L1 363 S MP52 OR (MP 52) OR GDF5 OR (GDF 5) OR ((GROWTH(1A)DIFFERENT
L2 0 S L1 AND (530, 435, 514/COR)
L3 0 S L1 AND (530, 435, 514/CLAS)
L4 178 S L1 AND (530 OR 435 OR 514/CLAS)
L5 33 S MP52 OR GDF5 OR GDF3 OR ((GDF OR ((GROWTH(1A)DIFFERENTIATIO
L6 347 S MP 52
L7 5 S L6 AND (435/69.1-69.7/CCLST OR 530/350-399/CCLST OR 514/12/
L8 171 S L6 AND (435 OR 530 OR 514 OR 424)/CLAS

=> s l7 not l5

L9 3 L7 NOT L5

=> d bib ab 1-

US PAT NO: 5,567,411 [IMAGE AVAILABLE] L9: 1 of 3
DATE ISSUED: Oct. 22, 1996
TITLE: Dendritic amplifier molecules having multiple terminal active groups stemming from a benzyl core group
INVENTOR: John F. W. Keana, Eugene, OR
Vladimir Martin, Eugene, OR
William H. Ralston, St. Charles, MO
ASSIGNEE: State of Oregon Acting by and Through the State Board of Higher Education on Behalf of the University of Oregon, Eugene, OR (U.S. corp.)
APPL-NO: 08/316,787
DATE FILED: Sep. 29, 1994
ART-UNIT: 121
PRIM-EXMR: Floyd D. Higel
LEGAL-REP: Klarquist Sparkman Campbell Leigh & Whinston, LLP

US PAT NO: 5,567,411 [IMAGE AVAILABLE] L9: 1 of 3

ABSTRACT:
Dendritic derivatives of 3,5-bis(aminomethyl)benzene and aminomethyl benzene core groups are disclosed. In each derivative, termed an "amplifier" because the dendritic structure on each molecule terminates with multiple termini to each of which an "active group" can be attached, the desired effect of the active group per mole is amplified compared to conventional compounds having only one active group per molecule. Amplifier molecules can include a targeting group permitting the molecules to preferentially attach to a particular anatomical or physiological situs. Active groups s are any of various pharmacologically or therapeutically active moieties, including moieties useful for magnetic-resonance contrast enhancement. The dendritic structures comprise linkers and branch groups covalently bonded to each other in any of various structural combinations. The amplifiers can be prepared as a solution or mixture with a physiologically compatible carrier for administration to a warm-blooded animal subject. Also disclosed are methods for using the compounds in diagnosis and therapy, such as obtaining a magnetic resonance image of a subject.

US PAT NO: 5,141,924 [IMAGE AVAILABLE] L9: 2 of 3
DATE ISSUED: Aug. 25, 1992
TITLE: Synthetic vasoactive intestinal peptide analogs
INVENTOR: David R. Bolin, Denville, NJ
ASSIGNEE: Hoffmann-La Roche, Inc., Nutley, NJ (U.S. corp.)
APPL-NO: 07/374,503
DATE FILED: Jun. 30, 1989
ART-UNIT: 181
PRIM-EXMR: Merrell C. Cashion, Jr.
ASST-EXMR: T. D. Wessendorf
LEGAL-REP: George M. Gould, William H. Epstein, Bruce A. Pokras

US PAT NO: 5,141,924 [IMAGE AVAILABLE] L9: 2 of 3

ABSTRACT:
Vasoactive intestinal peptide analogs containing substitutions of appropriately selected amino acids at specific positions of the VIP molecule.

US PAT NO: 5,061,710 [IMAGE AVAILABLE] L9: 3 of 3
DATE ISSUED: Oct. 29, 1991

TITLE: Mercapto-acylamino acid antihypertensives
INVENTOR: Martin F. Haslanger, Ridgewood, NJ
Bernard R. Neustadt, West Orange, NJ
Elizabeth M. Smith, Verona, NJ
ASSIGNEE: Schering Corporation, Kenilworth, NJ (U.S. corp.)
APPL-NO: 07/133,669
DATE FILED: Dec. 16, 1987
ART-UNIT: 121
PRIM-EXMR: Mary C. Lee
ASST-EXMR: Robert C. Whittenbaugh
LEGAL-REP: Anita W. Magatti, James Nelson

US PAT NO: 5,061,710 [IMAGE AVAILABLE] L9: 3 of 3

ABSTRACT:
Novel mercapto-acylamino acids useful in the treatment of hypertension and combinations of mercapto-acylamino acids and atrial natriuretic factors or angiotensin converting enzyme inhibitors useful for treating hypertension are disclosed.

=> d kwic 2

US PAT NO: 5,141,924 [IMAGE AVAILABLE] L9: 2 of 3
US-CL-CURRENT: **514/12**, 20; 530/324, 325; 930/170, DIG.800, DIG.820, DIG.821

DETDESC:

DETD(149)

988 . . . and concentrated to an oil. This material was crystallized from EtOAc/hexane to give 1.14 g (82%) of fine white needles. **mp** **52**.degree.-54.degree. C. [a].sub.D +23.13.degree. (c 1, EtOAc). .sup.1 H NMR compatible with structure. Anal. calcd for C.sub.14 H.sub.18 FNO.sub.4 : C, . . .

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(FILE 'USPAT' ENTERED AT 08:02:22 ON 10 NOV 1998)
L1 363 S MP52 OR (MP 52) OR GDF5 OR (GDF 5) OR ((GROWTH(1A)DIFFERENT
L2 0 S L1 AND (530, 435, 514/COR)
L3 0 S L1 AND (530, 435, 514/CLAS)
L4 178 S L1 AND (530 OR 435 OR 514/CLAS)
L5 33 S MP52 OR GDF5 OR GDF3 OR ((GDF OR ((GROWTH(1A)DIFFERENTIA
T10
L6 347 S MP 52
L7 5 S L6 AND (435/69.1-69.7/CCLST OR 530/350-399/CCLST OR 514/
12/
L8 171 S L6 AND (435 OR 530 OR 514 OR 424)/CLAS
L9 3 S L7 NOT L5

U.S. Patent & Trademark Office LOGOFF AT 08:33:23 ON 10 NOV 1998

FILE 'HOME' ENTERED AT 08:55:43 ON 10 NOV 1998

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=> s mp52 or (mp 52) or gdf5 or gdf3 or ((gdf or ((growth(1a)differentiation)(w)factor))(w)(3 or 5))

0 MP52
3823 MP
71804 52
0 MP 52
(MP(W)52)
9 GDF5
1 GDF3
50 GDF
474998 GROWTH
145979 DIFFERENTIATION
377868 FACTOR
1591987 3
1272154 5
26 (GDF OR ((GROWTH(1A)DIFFERENTIATION)(W)FACTOR))(W)(3 OR 5)
L1 28 MP52 OR (MP 52) OR GDF5 OR GDF3 OR ((GDF OR ((GROWTH(1A)DI
FFERENTIATION)(W)FACTOR))(W)(3 OR 5))

=> d au ti so ab l-

YOU HAVE REQUESTED DATA FROM 28 ANSWERS - CONTINUE? Y/(N):y

L1 ANSWER 1 OF 28 MEDLINE
AU Williamson C M; Beechey C V; Ball S T; Dutton E R; Cattanach B M; Tease C; Ishino F; Peters J
TI Localisation of the imprinted gene neuronatin, Nnat, confirms and refines the location of a second imprinting region on mouse chromosome 2.
SO CYTOGENETICS AND CELL GENETICS, (1998) 81 (1) 73-8.
Journal code: DXK. ISSN: 0301-0171.
AB Nine regions on six mouse autosomes are subject to imprinting and uniparental inheritance of any one of these regions results in mice with phenotypic anomalies. So far on distal Chromosome (Chr) 2 there is a unique imprinting region between 2H3 and 2H4 associated with two behavioural disorders and neonatal lethality. A maternally imprinted gene, Nnat, has been identified which is expressed in the nervous system and maps to distal Chr 2. Nnat has been excluded as a candidate for either or both the behavioural phenotypes as it lies proximal to the 2H3-2H4 imprinting region. Here we have mapped Nnat to band 2H1 which is at least 18 Mb proximal to the previously described imprinting region. It maps close to agouti, some alleles of which show differential expression according to parental origin. The localisation of Nnat to band H1 confirms and refines the map location of a second imprinting region on mouse Chr 2.

L1 ANSWER 2 OF 28 MEDLINE
AU Brunet L J; McMahon J A; McMahon A P; Harland R M
TI Noggin, cartilage morphogenesis, and joint formation in the mammalian skeleton [see comments].
SO SCIENCE, (1998 May 29) 280 (5368) 1455-7.
Journal code: 0404511. ISSN: 0036-8075.
AB Noggin is a bone morphogenetic protein (BMP) antagonist expressed in Spemann's organizer. Murine Noggin is expressed in condensing cartilage and immature chondrocytes, as are many BMPs. In mice lacking Noggin, cartilage condensations initiated normally but developed hyperplasia, and initiation of joint development failed as measured by the expression of ***growth*** and ***differentiation*** ***factor*** ***5*** . The maturation of cartilage and Hox2 expression were unaffected. Excess BMP activity in the absence of Noggin antagonism may enhance the recruitment of cells into cartilage, resulting in oversized growth plates; chondrocytes are also refractory to joint-inducing positional cues.

L1 ANSWER 3 OF 28 MEDLINE
AU Morotome Y; Goseki-Sone M; Ishikawa I; Oida S
TI Gene expression of growth and differentiation factors-5, -6, and -7 in developing bovine tooth at the root forming stage [published erratum appears in Biochem Biophys Res Commun 1998 May 29;246(3):925].
SO BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1998 Mar 6) 244 (1) 85-90.
Journal code: 9Y8. ISSN: 0006-291X.
AB Growth and differentiation factors (***GDF***)- ***5*** , -6, and -7 are members of the bone morphogenetic protein (BMP) family. Previous studies suggest their importance in bone development and in tendon/ligament morphogenesis. The cells of the dental attachment apparatus, cementum, periodontal ligament, and alveolar bone proper are derived from the dental follicle proper. In this study, we investigated the expression of ***GDF*** - ***5*** , -6, and -7 genes in tissues of the bovine incisor tooth germ at the root forming stage. The results demonstrate distinct expression of GDFs in both the dental follicle and the odontoblast layer. While ***GDF*** - ***5*** and -6 mRNAs were expressed in both the dental follicle and the odontoblast layer, GDF-7 mRNA expression was detected only in the dental follicle. These results indicate that GDFs, expressed in the bovine tooth germ including the dental follicle, may be potent regulatory molecules in the development of the dental attachment apparatus.

L1 ANSWER 4 OF 28 MEDLINE
AU Kim D S; Korting H C; Schafer-Korting M
TI Effects of growth factors on the proliferation of human keratinocytes and fibroblasts in vitro.
SO PHARMAZIE, (1998 Jan) 53 (1) 51-7.
Journal code: P4D. ISSN: 0031-7144.
AB ***Growth*** / ***differentiation*** ***factor*** - ***5*** (***GDF*** - ***5***) is a new member (of the transforming growth factor-beta (TGF-beta) superfamily of multifunctional peptide growth factors that appear to mediate many key events in cell growth and development. The effects of ***GDF*** - ***5*** and other growth factors (epidermal growth factor, EGF; TGF-beta 1) on the proliferation of human keratinocytes and fibroblasts compared with desoximetasone and calcipotriol have been investigated. The proliferation rate was determined by a hemocytometer, MTT assay and the incorporation of [3H]-thymidine. Moreover, cell cycle analyses were performed and the influence on interleukin-1 alpha (IL-1 alpha) production in keratinocytes was measured by enzyme-linked immunosorbent assay (ELISA) because of its pronounced proinflammatory effect. In keratinocytes, ***GDF*** - ***5*** stimulated cell proliferation to a minor extent. The drug already proved to be effective at very low concentrations (0.1 ng/ml). Growth stimulatory effects with EGF have been observed only in keratinocyte basal medium (KBM), but not in keratinocyte growth medium (KGM). TGF-beta 1 markedly inhibited the proliferation of keratinocytes at concentrations > 1 ng/ml. Calcipotriol and desoximetasone also showed a dose-dependent cell growth inhibition in epidermal cell cultures. IL-1 alpha synthesis was greatly suppressed by calcipotriol 10(-8)-10(-6) M. EGF at 10 ng/ml, in contrast, strongly stimulated IL-1 alpha production. Neither ***GDF*** - ***5*** nor TGF-beta 1 had a significant effect on IL-1 alpha production in keratinocyte monolayer cultures. In fibroblasts, ***GDF*** - ***5*** induced very weak antiproliferative effects. Calcipotriol and desoximetasone also inhibited cell growth in fibroblast cultures whereas proliferation and DNA synthesis were strongly stimulated by 1 ng/ml EGF. There was, however, a contradiction between TGF-beta 1 results on fibroblasts. Whereas TGF-beta 1 increased proliferation in cell number determination and in the thymidine incorporation assay, MTT assays showed slight antiproliferative effects. Due to these controversial results, in addition cell cycle analysis was employed. TGF-beta 1 led to an increased S phase, which indicates a stimulation of cell division. The different results obtained with the MTT test suggest that TGF-beta 1 may stimulate cell division of fibroblasts not only by increasing the S phase, but also by shortening the G1 phase of the cell cycle.

L1 ANSWER 5 OF 28 MEDLINE
AU Caricasole A A; van Schaik R H; Zeinstra L M; Wierikx C D; van Gurp R J; van den Pol M; Lenjenga L H; Oostrehuis J W; Peza M F; Ward A; de Bruijn D; Kramer P; de Jong F H; van den Eijnden-van Raaij A J
TI Human ***growth*** - ***differentiation*** ***factor*** ***3*** (hGDF3): developmental regulation in human teratocarcinoma cell lines and expression in primary testicular germ cell tumours.
SO ONCOGENE, (1998 Jan 8) 16 (1) 95-103.
Journal code: ONC. ISSN: 0950-9232.
AB We describe the cloning and initial characterization of a novel cDNA from human embryonal carcinoma (EC) cells. This cDNA, which we named human ***growth*** / ***differentiation*** ***factor*** ***3*** (hGDF3), encodes the homologue of mouse ***GDF3*** , a TGFbeta superfamily member belonging to the Growth/Differentiation Factors. We have analysed the expression of hGDF3 in human embryonal carcinoma cell lines and in primary testicular germ cell tumours of adolescents and adults (TGCTs). Expression of hGDF3 in human EC cell lines is stem cell-specific, is down-regulated upon RA-mediated differentiation and is increased upon culture of the cells in the presence of activin A. In TGCTs, hGDF3 expression is low in seminomas, while expression in non-seminomas is readily detectable and appears to be associated with the EC and yolk sac components in the tumours. We have also mapped the hGDF3 locus to the short arm of human chromosome 12, a region consistently overrepresented in human testicular germ cell tumours. Thus, hGDF3 represents an embryonal carcinoma stem cell-associated marker both in vitro and in vivo.

L1 ANSWER 6 OF 28 MEDLINE
AU Luyten F P
TI Cartilage-derived morphogenetic protein-1.
SO INTERNATIONAL JOURNAL OF BIOCHEMISTRY AND CELL BIOLOGY, (1997 Nov) 29 (11) 1241-4. Ref: 11
Journal code: CDK. ISSN: 1357-2725.
AB A new morphogenic secreted protein has been identified with direct evidence for its involvement in skeletal development and joint morphogenesis. Cartilage-derived morphogenetic protein-1 (Cdmp1) and its mouse homologue ***growth*** / ***differentiation*** ***factor*** ***5*** (***Gdf5***) were discovered independently using a degenerate PCR screen for bone morphogenetic protein-like genes. Cdmp1/ ***Gdf5*** belongs to the TGF-beta superfamily, a large group of signaling molecules that are secreted as biologically active dimers with a carboxyl-terminal domain containing seven highly conserved cysteines. Its temporal and spatial expression pattern is mostly restricted to the developing appendicular skeleton. Genetic studies revealed that effective null mutations in the gene are associated with short limbs, brachypodism (bp) in mice and acromesomelic chondrodysplasia in humans. Recombinantly expressed protein initiates and promotes chondrogenesis and to a limited extent osteogenesis in vitro and in vivo. This makes this polypeptide a potential therapeutic agent in the regeneration of skeletal tissues.

L1 ANSWER 7 OF 28 MEDLINE
AU Farkas L M; Scheuermann S; Pohl J; Unsicker K; Krieglstein K
TI Characterization of ***growth*** / ***differentiation*** ***factor*** ***5*** (***GDF*** - ***5***) as a neurotrophic factor for cultured neurons from chicken dorsal root ganglia.
SO NEUROSCIENCE LETTERS, (1997 Oct 31) 236 (2) 120-2.
Journal code: N7N. ISSN: 0304-3940.
AB ***Growth*** / ***differentiation*** ***factor*** - ***5*** (***GDF*** - ***5***), a morphogenetic protein, has previously been shown to act as a neurotrophic factor for midbrain dopaminergic neurons. To further elucidate the neurotrophic potential of ***GDF*** - ***5*** , serum free cultures of dorsal root ganglionic (DRG) neurons from developing chick embryos were treated with ***GDF*** - ***5*** with or without the simultaneous addition of other trophic factors. Our results show that ***GDF*** - ***5*** has a minor promoting effect on its own, but it can enhance the survival promoting effect of neurotrophin-3 (NT-3) and nerve growth factor (NGF) on cultured DRG neurons. Our finding fits well into the concept that neurotrophic factors may act synergistically in ensuring survival of different neuronal populations. The capacity of ***GDF*** - ***5*** to reduce the requirement of a subpopulation of sensory neurons for NT-3 may have implications for the treatment of peripheral neuropathies.

L1 ANSWER 8 OF 28 MEDLINE
AU Lentz S J; Varricchio M; Smith S G; Ficsor G
TI Detection of low copy number inversions in mouse genomic DNA with unidirectional PCR primers.
SO ENVIRONMENTAL AND MOLECULAR MUTAGENESIS, (1997) 30 (3) 260-3.
Journal code: EMM. ISSN: 0893-6692.
AB The recessive brachypodism (bp) mutation, located in the ***growth*** / ***differentiation*** ***factor*** ***5*** (***GDF5***) gene, causes highly specific skeletal changes in the limbs of brachypod mice. Although Southern blot analysis does not distinguish sequence disruptions in the ***GDF5*** sequence of brachypod mice, sequencing and mapping ***GDF5*** mRNA reveals the bp mechanism to be an inversion preceded by a small deletion. We report here a simple and sensitive method of bp detection from mouse genomic DNA. Previous bp detection used degenerate PCR sequencing. However, without automation, sequencing is a laborious effort for ***GDF5*** inversion detection. The method developed utilizes two unidirectional primers in PCR (UP-PCR), which allow for quick and sensitive analysis of gel electrophoresed PCR products. UP-PCR of the ***GDF5*** gene in wildtype mouse genomic DNA cannot amplify a fragment due to the unidirectional primers. However, UP-PCR of the ***GDF5*** gene in bp mouse genomic DNA does amplify a fragment from the ***GDF5*** gene. Amplification occurs because of the inverted fragment in bp ***GDF5*** . This fragment changes the direction of the second forward primer 180 degrees to the position of a reverse primer. UP-PCR detection of the bp inverted fragment is highly sensitive. Amplified fragments were obtained from the bp genomic DNA in the presence of wildtype genomic DNA in ratios up to 1:10(6), respectively. The sensitivity and simplicity of this method allow for quick, inexpensive, and reliable detection of the bp inversion.

L1 ANSWER 9 OF 28 MEDLINE
AU Sullivan A M; Opacka-Juffry J; Hotten G; Pohl J; Blunt S B
TI ***Growth*** / ***differentiation*** ***factor*** ***5*** protects nigrostriatal dopaminergic neurones in a rat model of Parkinson's disease.
SO NEUROSCIENCE LETTERS, (1997 Sep 19) 233 (2-3) 73-6.
Journal code: N7N. ISSN: 0304-3940.
AB ***Growth*** / ***differentiation*** ***factor*** ***5*** (***GDF5***), a novel member of the transforming growth factor beta superfamily, promotes the survival of dopaminergic neurones in vitro. We present here the first evidence for a neuroprotective action of ***GDF5*** in vivo. We investigated the effects of intracerebral administration of ***GDF5*** on a rat model of Parkinson's disease. ***GDF5*** was administered just above the substantia nigra and into the lateral ventricle immediately before ipsilateral injection of 6-hydroxydopamine into the medial forebrain bundle. ***GDF5*** prevented the development of amphetamine-induced rotations and preserved the integrity of striatal dopaminergic nerve terminals, as measured by positron emission tomography. Post-mortem studies showed that ***GDF5*** spared dopamine levels in the striatum and tyrosine hydroxylase positive neurones in the midbrain. This study suggests that ***GDF5*** has potential for the treatment of Parkinson's disease.

L1 ANSWER 10 OF 28 MEDLINE
AU Polinkovsky A; Robin N H; Thomas J T; Irons M; Lynn A; Goodman F R; Reardon W; Kant S G; Brunner H G; van der Burgt I; Chitayat D; McGaughran J; Donnai D; Luyten F P; Warman M L
TI Mutations in CDMP1 cause autosomal dominant brachydactyly type C (letter).
SO NATURE GENETICS, (1997 Sep) 17 (1) 18-9.
Journal code: BRO. ISSN: 1061-4036.

L1 ANSWER 11 OF 28 MEDLINE
AU Yamashita H; Shimizu A; Kato M; Nishitoh H; Ichijo H; Hanyu A; Morita I; Kimura M; Makishima F; Miyazono K
TI ***Growth*** / ***differentiation*** ***factor*** - ***5*** induces angiogenesis in vivo.
SO EXPERIMENTAL CELL RESEARCH, (1997 Aug 25) 235 (1) 218-26.
Journal code: EPB. ISSN: 0014-4827.
AB Bone morphogenetic proteins (BMPs) are multifunctional cytokines, which induce bone and cartilage formation and exert various other effects on many tissues. Since angiogenesis is involved in the bone formation process, certain members in the BMP family may induce angiogenesis. We examined the in vivo angiogenic activity of BMP family members, i.e., growth/differentiation factor (***GDF***)-***5*** and BMP-2. ***GDF*** - ***5*** induced angiogenesis

in both chick chorioallantoic membrane and rabbit cornea assays. In contrast, BMP-2 did not induce angiogenesis. In order to elucidate the mechanism of angiogenesis, we examined the effects of ***GDF*** - ***5*** on cultured bovine aortic endothelial cells (BECs). ***GDF*** - ***5*** induced plasminogen activator activity and accelerated the migration of BECs in a chemotactic fashion, which may contribute to the process of angiogenesis in vivo. These results suggest that ***GDF*** - ***5*** is one of the molecules which induce angiogenesis in the bone formation process.

L1 ANSWER 12 OF 28 MEDLINE

AU Bruneau S; Mourrain P; Rosa F M

TI Expression of contact, a new zebrafish DVR member, marks mesenchymal cell lineages in the developing pectoral fins and head and is regulated by retinoic acid.

SO MECHANISMS OF DEVELOPMENT, (1997 Jul) 65 (1-2) 163-73.
Journal code: AXF. ISSN: 0925-4773.

AB Contact, a new zebrafish transforming growth factor-beta (TGF-beta) member is most closely related to mouse ***GDF5*** and to human CDMP-1 responsible, when mutated, for limb brachypodism phenotype and Hunter-Thompson syndrome, respectively. Contact exhibits a dynamic spatial expression pattern in the pharyngeal arches and the pectoral fin buds that much prefigures cartilage formation. Within the fin buds, contact expression is detected in the proximal mesenchyme from which the endoskeleton will develop. Exogeneously applied retinoic acid (RA) induces duplication of the pectoral fin rudiment in zebrafish embryos as well as contact expression along the proximal margin of the fin mesenchyme showing that both endoskeleton and exoskeleton can be duplicated.

L1 ANSWER 13 OF 28 MEDLINE

AU Wolfman N M; Hattersley G; Cox K; Celeste A J; Nelson R; Yamaji N; Dube J L; DiBlasio-Smith E; Nove J; Song J J; Wozney J M; Rosen V

TI Ectopic induction of tendon and ligament in rats by growth and differentiation factors 5, 6, and 7, members of the TGF-beta gene family.

SO JOURNAL OF CLINICAL INVESTIGATION, (1997 Jul 15) 100 (2) 321-30.
Journal code: HS7. ISSN: 0021-9738.

AB Little is known about the regulatory signals involved in tendon and ligament formation, and this lack of understanding has hindered attempts to develop biologically based therapies for tendon and ligament repair. Here we report that growth and differentiation factors (GDFs) 5, 6, and 7, members of the TGF-beta gene superfamily that are most related to the bone morphogenetic proteins, induce neotendon/ligament formation when implanted at ectopic sites in vivo. Analysis of tissue induced by ***GDF*** - ***5*** , 6, or 7, containing implants by currently available morphological and molecular criteria used to characterize tendon and ligament, adds further evidence to the idea that these GDFs act as signaling molecules during embryonic tendon/ligament formation. In addition, comparative in situ localizations of the ***GDF*** - ***5*** , 6, and 7 mRNAs suggest that these molecules are important regulatory components of synovial joint morphogenesis.

L1 ANSWER 14 OF 28 MEDLINE

AU Nishitoh H

TI Identification of receptors for bone morphogenetic proteins.

SO KOKUBYO GAKKAI ZASSHI. THE JOURNAL OF THE STOMATOLOGICAL SOCIETY, JAPAN, (1997 Mar) 64 (1) 24-37.
Journal code: IQF. ISSN: 0300-9149.

AB Bone morphogenetic protein (BMP)-7/osteogenic protein (OP)-1 and growth/differentiation factor (***GDF***)- ***5*** are members of the BMP family. BMPs transduce their effects through binding to two different types of serine/threonine kinase receptors, type I and type II. Here we investigated the binding and signaling properties of BMP-7/OP-1 and ***GDF*** - ***5*** through type I and type II receptors. BMP-7/OP-1 was found to bind Activin receptor-like kinase (ALK)-1 as well as ALK-3/BMPR-IA in ATDC5 cells. When ALK-1 or ALK-3/BMPR-IA was stably transfected into mink lung epithelial cells, ALK-1 and ALK-3/BMPR-IA mediated signals for BMP-7/OP-1 with heterogeneous signaling specificities. ***GDF*** - ***5*** bound to ALK-6/BMPR-IB and BMP type II receptor (BMPR-II) but not to ALK-3/BMPR-IA in ROB-C26 cells. Analysis using COS-1 cells revealed that ***GDF*** - ***5*** bound to ALK-6/BMPR-IB, but not to the other type I receptors when expressed alone. When COS-1 cells were transfected with type II receptor cDNAs, ***GDF*** - ***5*** bound to Activin type II receptor (ActR-II) and type IIB receptors as well as BMPR-II but not to TGF-beta type II receptor. In the presence of type II receptors, ***GDF*** - ***5*** bound to different sets of type I receptors, but the binding was most efficient to ALK-6/BMPR-IB compared to the other type I receptors. Moreover, ***GDF*** - ***5*** transduced the signal efficiently by ALK-6/BMPR-IB in the presence of BMPR-II or ActR-II.

L1 ANSWER 15 OF 28 MEDLINE

AU Vortkamp A

TI Defining the skeletal elements.

SO CURRENT BIOLOGY, (1997 Feb 1) 7 (2) R104-7. Ref: 23
Journal code: B44. ISSN: 0960-9822.

AB A recent study of mice carrying different combinations of mutations in the genes for two bone morphogenetic factors (BMPs), BMP5 and ***GDF5*** , indicates that BMPs have specific and synergistic functions in the regulation of skeleton development.

L1 ANSWER 16 OF 28 MEDLINE

AU Storm E E; Kingsley D M

TI Joint patterning defects caused by single and double mutations in members of the bone morphogenetic protein (BMP) family.

SO DEVELOPMENT, (1996 Dec) 122 (12) 3969-79.
Journal code: ECW. ISSN: 0950-1991.

AB The mouse brachypodism locus encodes a bone morphogenetic protein (BMP)-like molecule called ***growth*** / ***differentiation*** ***factor*** ***5*** (***GDF5***). Here we show that ***Gdf5*** transcripts are expressed in a striking pattern of transverse stripes within many skeletal precursors in the developing limb. The number, location and time of appearance of these stripes corresponds to the sites where joints will later form between skeletal elements. Null mutations in ***Gdf5*** disrupt the formation of more than 30% of the synovial joints in the limb, leading to complete or partial fusions between particular skeletal elements, and changes in the patterns of repeating structures in the digits, wrists and ankles. Mice carrying null mutations in both ***Gdf5*** and another BMP family member, Bmp5, show additional abnormalities not observed in either of the single mutants. These defects include disruption of the sternebrae within the sternum and abnormal formation of the fibrocartilaginous joints between the sternebrae and ribs. Previous studies have shown that members of the BMP family are required for normal development of cartilage and bone. The current studies suggest that particular BMP family members may also play an essential role in the segmentation process that cleaves skeletal precursors into separate elements. This process helps determine the number of elements in repeating series in both limbs and sternum, and is required for normal generation of the functional articulations between many adjacent structures in the vertebrate skeleton.

L1 ANSWER 17 OF 28 MEDLINE

AU Hall B K; Miyake T

TI Divide, accumulate, differentiate: cell condensation in skeletal development revisited.

SO INTERNATIONAL JOURNAL OF DEVELOPMENTAL BIOLOGY, (1995 Dec) 39 (6) 881-93. Ref: 145
Journal code: AV3. ISSN: 0214-6282.

AB Cell condensation is a pivotal stage in skeletal development. Although prechondrogenic condensations normally exist for some 12 h, duration can vary. Variation is seen both between condensations for different cartilages (Meckel's vs. elastic ear cartilage) and within a single condensation from which more than one skeletal element will form, as in the three components of the single first arch chondrogenic condensation. Understanding how duration of the condensation phase is established--how the condensation phase is entered and exited during cell differentiation--remains a major area for future study. During chondrogenesis, cell-specific products such as collagen types II and IX and cartilage proteoglycan appear concomitant with condensation. Therefore, during chondrogenesis, condensation precedes commitment of cells as prechondroblasts. During osteogenesis, however, differentiation of preosteoblasts precedes condensation. Therefore, during osteogenesis, condensation amplifies the number of committed osteogenic cells. Further comparative analysis of skeletogenesis should provide us with a more rigorous understanding of cell commitment, when differentiation is initiated, how commitment and differentiation are measured and the relationship of condensation to onset of differentiation. Current knowledge of molecules characteristic of condensations focused attention on extracellular matrix and cell surface components on the one hand, and on growth factors homeobox genes and transcription factors on the other. We have drawn together the molecular data for pre-chondrogenic condensations in diagrammatic form in Figure 2. Three major phases of chondrogenesis are identified: (a) epithelial-mesenchymal interactions that precede condensation, (b) condensation itself, and (c) cell differentiation. Although we label the third phase differentiation, it is important to recognize that phases a and b also constitute aspects of chondroblast cell differentiation (see Dunlop and Hall, 1995 for a discussion of this point. The pre-condensation phase is characterized by expression of Hox genes, growth factors (TGF-beta and BMP-2) and the cell surface proteoglycan receptor, syndecan-1. Expression of Msx-1 and Msx-2, growth factors and syndecan continues into the condensation phase. Other molecules, such as versican, syndecan-3 and tenascin, present in low concentrations before condensation, are up-regulated during condensation. Yet other molecules--Hox genes, transcription factors, growth factors (activin, BMP-4 and -5, ***GDF*** - ***5***), cell adhesion molecules and proteoglycans--are only expressed during the condensation phase, while the transcription factor Pax-1, fibronectin, hyaluronan and hyaladherin are expressed both during and after condensation. During condensation mRNAs for collagen types II and IX and for the core protein of cartilage proteoglycan are up-regulated. Late in condensation and increasingly thereafter, the protein products of these genes accumulate as chondroblasts differentiate (see Fig. 2 for details). Not all the molecules present before, during of after condensation can be placed into causal sequences. Some however can. In Figure 3 we summarize the causal sequences discussed in this paper as they relate to initiation of condensation and to transit from condensation to overt differentiation during chondrogenesis. Condensations form following activation of at least three pathways: (1) Initiation of epithelial-mesenchymal interactions by tenascin, BMP-2, TGF beta-1 and Msx-1 and -2. (2) Up-regulation of N-CAM by activin. (3) Up-regulation of fibronectin by TGF-beta, further enhancing N-CAM accumulation (Fig. 3). It is by these three pathways that condensations are initiated and grow. Transition from condensation to overt cell differentiation is under both positive and negative control (Fig. 3). Syndecan blocks fibronectin and so blocks N-CAM accumulation, preventing accumulation of additional cell

L1 ANSWER 18 OF 28 MEDLINE

AU Hotten G C; Matsumoto T; Kimura M; Bechtold R F; Kron R; Ohara T; Tanaka H; Satoh Y; Okazaki M; Shirai T; Pan H; Kawai S; Pohl J S; Kudo A

TI Recombinant human ***growth*** / ***differentiation*** ***factor*** ***5*** stimulates mesenchyme aggregation and chondrogenesis responsible for the skeletal development of limbs.

SO GROWTH FACTORS, (1996) 13 (1-2) 65-74.
Journal code: AOI. ISSN: 0897-7194.

AB We have expressed and biologically characterized recombinant human ***growth*** / ***differentiation*** ***factor*** ***5*** (huGDF5). This protein is composed of a mature homodimer consisting of 15 kD subunits. Using recombinant expressed protein, we have demonstrated that huGDF5 in vitro stimulated mesenchyme aggregation and chondrogenesis in rat limb bud cells. In vivo, partially purified huGDF5 induced cartilage and bone formation in muscular tissues of rodents. However, in contrast to the effects of other BMPs, as for example BMP-2, the osteoblastic MC3T3-E1 cells did not respond to huGDF5 as measured by alkaline phosphatase activity. These results suggest that the action of ***GDF5*** may be relatively specific for chondrogenesis during the entire process of the endochondral bone formation. ***GDF5*** may control the morphogenesis of cartilaginous tissue, including joints, in the skeletal development of limbs.

L1 ANSWER 19 OF 28 MEDLINE

AU Nishitoh H; Ichijo H; Kimura M; Matsumoto T; Makishima F; Yamaguchi A; Yamashita H; Enomoto S; Miyazono K

TI Identification of type I and type II serine/threonine kinase receptors for ***growth*** / ***differentiation*** ***factor*** - ***5*** .

SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1996 Aug 30) 271 (35) 21345-52.
Journal code: HIV. ISSN: 0021-9258.

AB ***Growth*** / ***differentiation*** ***factor*** - ***5*** (***GDF*** - ***5***) is a member of the bone morphogenetic protein (BMP) family, which plays an important role in bone development in vivo. Mutations in the ***GDF*** - ***5*** gene result in brachypodism in mice and Hunter-Thompson type chondrodysplasia in human. BMPs transduce their effects through binding to two different types of serine/threonine kinase receptors, type I and type II. However, binding abilities appear to be different among the members of the BMP family. BMP-4 binds to two different type I receptors, BMP receptors type IA (BMPR-IA) and type IB (BMPR-IB), and a type II receptor, BMP receptor type II (BMPR-II). In addition to these receptors, osteogenic protein-1 (OP-1, also known as BMP-7) binds to activin type I receptor (ActR-I) as well as activin type II receptors (ActR-II and ActR-IIB). Here we investigate the binding and signaling properties of ***GDF*** - ***5*** through type I and type II receptors. ***GDF*** - ***5*** induced alkaline phosphatase activity in a rat osteoprogenitor-like cell line, ROB-C26. 125I- ***GDF*** - ***5*** bound to BMPR-IB and BMPR-II but not to BMPR-IA in ROB-C26 cells and other nontransfected cell lines. Analysis using COS-1 cells transfected with the receptor cDNAs revealed that ***GDF*** - ***5*** bound to BMPR-IB but not to the other type I receptors when expressed alone. When COS-1 cells were transfected with type II receptor cDNAs, ***GDF*** - ***5*** bound to ActR-II, ActR-IIB, and BMPR-II but not to transforming growth factor-beta type II receptor. In the presence of type II receptors, ***GDF*** - ***5*** bound to different sets of type I receptors, but the binding was most efficient to BMPR-IB compared with the other type I receptors. Moreover, a transcriptional activation signal was efficiently transduced by BMPR-IB in the presence of BMPR-II or ActR-II after stimulation by ***GDF*** - ***5*** . These results suggest that BMPR-IB mediates certain signals for ***GDF*** - ***5*** after forming the heteromeric complex with BMPR-II or ActR-II.

L1 ANSWER 20 OF 28 MEDLINE

AU Brickell P M

TI MHox and vertebrate skeletogenesis: the long and the short of it.

SO BIOESSAYS, (1995 Sep) 17 (9) 750-3. Ref: 31
Journal code: 9YY. ISSN: 0265-9247.

AB The development of the vertebrate skeleton is under complex genetic control, and good progress is being made towards identifying the genes responsible. A recent paper contributes to this progress by describing transgenic mice in which the homeobox-containing MHox gene has been disrupted. MHox(-/-) mice have a range of skeletal defects, involving loss or shortening of structures in the skull, face and limb. Puzzling features of the MHox(-/-) mutation, which has similar effects on bones with very different embryological origins and yet spares other bones completely, may hold clues to the mechanisms that shape the skeleton. MHox(-/-) mice, used in conjunction with other skeletal mutants, will be important tools for exploring these mechanisms further.

L1 ANSWER 21 OF 28 MEDLINE

AU Francis-West P H; Richardson M K; Bell E; Chen P; Luyten F; Adelfattah A; Barlow A J; Brickell P M; Wolpert L; Archer C W

TI The effect of overexpression of BMPs and ***GDF*** - ***5*** on the development of chick limb skeletal elements.

SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (1996 Jun 8) 785 254-5.
Journal code: 5NM. ISSN: 0077-8923.

L1 ANSWER 22 OF 28 MEDLINE

AU Thomas J T; Lin K; Nandedkar M; Camargo M; Cervenka J; Luyten F P

TI A human chondrodysplasia due to a mutation in a TGF-beta superfamily member.

SO NATURE GENETICS, (1996 Mar) 12 (3) 315-7.
Journal code: BRO. ISSN: 1061-4036.

AB The TGF-beta superfamily comprises a number of functionally diverse growth factors/signalling molecules (1) which elicit their response upon binding to serine-threonine kinase receptors (2). We recently reported the isolation and characterization of two new members of the family, designated cartilage-derived morphogenetic protein (CDMP) 1 and 2 (ref. 3) which are closely related to the sub-family of bone morphogenetic proteins. CDMP-1 is predominantly expressed at sites of skeletal morphogenesis (3), and we now show that a mutation in hCDMP-1 is associated with a recessive human chondrodysplasia (acromesomelic chondrodysplasia, Hunter-Thompson type (4,5)). The disorder, characterized by skeletal abnormalities restricted to the limbs andlimb joints, is phenotypically similar to murine brachypodism (bp) which is due to mutations in ***growth*** / ***differentiation*** ***factor*** - ***5*** (***Gdf*** - ***5***) (6), the mouse homologue of hCDMP-1. Affected individuals are homozygous for a 22-bp (tandem-duplication) frameshift mutation in the mature region of CDMP-1. The resulting phenotype provides direct evidence for the involvement of CDMP-1 in human skeletal development and represents the first human disorder attributable to a mutation in a TGF-beta superfamily member.

L1 ANSWER 23 OF 28 MEDLINE

AU Krieglstein K; Suter-Crazzolara C; Hotten G; Pohl J; Unsicker K

TI Trophic and protective effects of ***growth*** / ***differentiation*** ***factor*** ***5*** , a member of the transforming growth factor-beta superfamily, on midbrain dopaminergic neurons.

SO JOURNAL OF NEUROSCIENCE RESEARCH, (1995 Dec) 42 (5) 724-32.
Journal code: KAC. ISSN: 0360-4012.

AB ***Growth*** / ***differentiation*** ***factor*** ***5*** (***GDF5***) is a novel member of the transforming growth factor-beta (TGF-beta) superfamily of multifunctional cytokines. We show here that ***GDF5*** is expresed in the developing CNS including the mesencephalon and acts as a neurotrophic, survival promoting molecule for rat dopaminergic midbrain neurons, which degenerate in Parkinson's disease. Recombinant human ***GDF5*** supports dopaminergic neurons, dissected at embryonic day (E) 14 and cultured for 8 days under serum-free conditions, to almost the same extent as TGF-beta 3, and is as effective as glial cell line-derived neurotrophic factor (GDNF), two established trophic factors for midbrain dopaminergic neurons. In contrast to TGF-beta and GDNF, ***GDF5*** augments numbers of astroglial cells in the cultures, suggesting that it may act indirectly and through pathways different from those triggered by TGF-beta and GDNF. ***GDF5*** also protects dopaminergic neurons against the toxicity of N-methylpyridinium ion (MPP+), which selectively damages dopaminergic neurons through mechanisms currently debated in the etiology of Parkinson's disease (PD). ***GDF5*** may therefore now be tested in animal models of PD and might become useful in the treatment of PD.

L1 ANSWER 24 OF 28 MEDLINE

AU Krieglstein K; Unsicker K

TI Bovine chromaffin cells release a transforming growth factor-beta-like molecule contained within chromaffin granules.

SO JOURNAL OF NEUROCHEMISTRY, (1995 Sep) 65 (3) 1423-6.
Journal code: JAV. ISSN: 0022-3042.

AB Bovine chromaffin cells contain within their storage vesicles and release upon cholinergic stimulation a complex mixture of proteins and peptides. We present data suggesting that one of these proteins resembles transforming growth factor (TGF)-beta in terms of its biological activity. The assay used to assess the activity of TGF-beta is based on cells transfected with a plasminogen activator

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     inhibitor-1 promoter-luciferase construct. The assay is highly
     specific in detecting TGF-beta 1, -beta 2, and -beta 3 but does not
     detect several cytokines and growth factors, such as fibroblast
     growth factor-2, transforming growth factor-alpha, platelet-derived
     growth factor-AB, insulin-like growth factor-1, or neurotrophin-3 or
     -4. Moreover, we show that this assay does not detect a wide range
     of TGF-beta superfamily members (activin A, bone morphogenetic
     protein-2, -4, -6, and -7,   ***growth***  /  ***differentiation***
       ***factor***  -  ***5***   , and glial cell line-derived neurotrophic
     factor). Chromaffin granules contain approximately 1 ng of
     TGF-beta/10 mg of protein. The biological activity elicited by the
     chromaffin granule component can be neutralized by using an antibody
     against TGF-beta 1/beta 2/beta 3. TGF-beta is releasable from
     cultured chromaffin cells stimulated with the cholinergic agonist
     carbachol (10(-5) M). These data suggest that TGF-beta is stored in
     chromaffin granules and can be released by exocytosis.

L1   ANSWER 25 OF 28  MEDLINE
AU   Reddi A H; Takita H
TI   Initiation of bone formation cascade by bone morphogenetic proteins.
SO   TANPAKUSHITSU KAKUSAN KOSO. PROTEIN, NUCLEIC ACID, ENZYME, (1995
     Apr) 40 (5) 467-74.  Ref: 54
     Journal code: Q7D. ISSN: 0039-9450.

L1   ANSWER 26 OF 28  MEDLINE
AU   Hotten G; Neidhardt H; Jacobowsky B; Pohl J
TI   Cloning and expression of recombinant human   ***growth***  /
       ***differentiation***     ***factor***     ***5***   .
SO   BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1994 Oct 28)
     204 (2) 646-52.
     Journal code: 9Y8. ISSN: 0006-291X.
AB   The complete amino acid sequence of human   ***Growth***  /
       ***differentiation***     ***factor***     ***5***   (huGdf5), a new
     member of the TGF-beta superfamily, has been determined through
     initial degenerate PCR and subsequent cloning and nucleotide
     sequencing of genomic DNA and cDNA encoding the precursor and
     flanking regions. The huGdf5 gene consists of only two coding exons.
     The protein is highly homologous to its murine equivalent,
     particularly the mature part which differs only by one amino acid.
     Expression in HuTK- cells using recombinant vaccinia virus revealed
     the expected processed dimeric mature protein. Antibodies against
     huGdf5 were raised in chicken.

L1   ANSWER 27 OF 28  MEDLINE
AU   Storm E E; Huynh T V; Copeland N G; Jenkins N A; Kingsley D M; Lee S
     J
TI   Limb alterations in brachypodism mice due to mutations in a new
     member of the TGF beta-superfamily [see comments].
SO   NATURE, (1994 Apr 14) 368 (6472) 639-43.
     Journal code: NSC. ISSN: 0028-0836.
AB   The mutation brachypodism (bp) alters the length and number of bones
     in the limbs of mice but spares the axial skeleton. It illustrates
     the importance of specific genes in controlling the morphogenesis of
     individual skeletal elements in the tetrapod limb. We now report the
     isolation of three new members of the transforming growth
     factor-beta (TGF-beta) superfamily (growth/differentiation factors (
       ***GDF***  )   ***5***  ,6 and 7) and show by mapping, expression
     patterns and sequencing that mutations in   ***Gdf5***   are
     responsible for skeletal alterations in bp mice.   ***GDF5***   and
     the closely related GDF6 and GDF7 define a new subgroup of factors
     related to known bone- and cartilage-inducing molecules, the bone
     morphogenetic proteins (BMPs). Studies of Bmp5 mutations in short
     ear mice have shown that at least one other BMP gene is also
     required for normal skeletal development. The highly specific
     skeletal alterations in bp and short ear mice suggest that different
     members of the BMP family control the formation of different
     morphological features in the mammalian skeleton.

L1   ANSWER 28 OF 28  MEDLINE
AU   McPherron A C; Lee S J
TI     ***GDF***  -  ***3***   and GDF-9: two new members of the
     transforming growth factor-beta superfamily containing a novel
     pattern of cysteines.
SO   JOURNAL OF BIOLOGICAL CHEMISTRY, (1993 Feb 15) 268 (5) 3444-9.
     Journal code: HIV. ISSN: 0021-9258.
AB   Two new mammalian members (  ***growth***  /  ***differentiation***
       ***factor***     ***3***    (  ***GDF***  -  ***3***  ) and GDF-9) of
     the transforming growth factor-beta superfamily were identified
     using degenerate oligonucleotides corresponding to conserved regions
     among known family members. By Northern analysis,   ***GDF***  -
       ***3***   transcripts were detected primarily in adult bone marrow,
     spleen, thymus, and adipose tissue. In contrast, GDF-9 transcripts
     were detected only in the ovary. Based on their cDNA sequences, the
     predicted   ***GDF***  -  ***3***   and GDF-9 polypeptides each
     contain a potential signal sequence for secretion, a putative
     tetrabasic proteolytic processing site, and a COOH-terminal region
     that shows significant homology to the known members of the
     transforming growth factor-beta superfamily. In the COOH-terminal
     region,   ***GDF***  -  ***3***   and GDF-9 are most homologous to
     Xenopus Vg-1 (57%) and human bone morphogenetic protein 4 (34%),
     respectively. Unlike all previously described members of this
     superfamily, both   ***GDF***  -  ***3***   and GDF-9 lack the
     conserved cysteine residue that is believed to form the sole
     disulfide linkage between subunits in other family members. These
     findings raise new possibilities regarding subunit interactions
     among members of this superfamily.

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 NEWS  2  Oct  7  Free Connect Hour in Adis Files
 NEWS  3  Nov 12  UMI Files no Longer Available on STN
 NEWS  4  Nov 19  PLEASE NOTE IMPORTANT DISPLAY CHANGES IN
                  CAPLUS/HCAPLUS/ZCAPLUS -  DATE CHANGE
 NEWS  5  Nov 23  No-Longer Polymers List added to CHEMLIST
 NEWS  6  Dec 23  Iteration and Answers Set Limits Increased in
                  REGISTRY/ZREGISTRY

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FILE 'HOME' ENTERED AT 10:53:07 ON 24 NOV 1998

=> file medline

COST IN U.S. DOLLARS                               SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      0.15       0.15

FILE 'MEDLINE' ENTERED AT 10:53:14 ON 24 NOV 1998

 FILE LAST UPDATED: 29 OCT 1998 (19981029/UP).  FILE COVERS 1966 TO DATE.

 THE MEDLINE FILE WAS RELOADED FEBRUARY 15, 1998, TO REFLECT THE ANNUAL
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 THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
 SUBSTANCE IDENTIFICATION.

=> e nobuhara m/au

E1           28      NOBUHARA K/AU
E2            8      NOBUHARA K K/AU
E3           37 --> NOBUHARA M/AU
E4            1      NOBUHARA R/AU
E5            1      NOBUHARA S/AU
E6            2      NOBUHARA T/AU
E7            2      NOBUHARA W K/AU
E8           19      NOBUHARA Y/AU
E9            2      NOBUHIKO N/AU
E10           1      NOBUHIKO S/AU
E11           1      NOBUHIRO M/AU
E12           1      NOBUHIRO S/AU

=> s e3

L1           37 "NOBUHARA M"/AU

=> e agric?/jt

E1         2606      AGRESSOLOGIE/JT
E2          283      AGRIC BIOL CHEM/JT
E3            0 --> AGRIC?/JT
E4          283      AGRICULTURAL AND BIOLOGICAL CHEMISTRY/JT
E5            9      AGRUP ODONTOL CAP FED B AIRES/JT
E6            7      AHME J/JT
E7            7      AHME JOURNAL/JT
E8          356      AHOT BE YISRAEL/JT
E9          356      AHOT BEYISRAEL/JT
E10         763      AICHI GAKUIN DAIGAKU SHIGAKKAI SHI/JT
E11         763      AICHI GAKUIN DAIGAKU SHIGAKKAI SHI AICHI GAKUIN JOURNA
                     L OF DENTAL SCIENCE/JT
E12          34      AICHI GAKUIN DENT SCI/JT

=> s l1 and e4

            283 "AGRICULTURAL AND BIOLOGICAL CHEMISTRY"/JT
                  ("AGRICULTURAL AND BIOLOGICAL CHEMISTRY"/JT)
L2            0 L1 AND "AGRICULTURAL AND BIOLOGICAL CHEMISTRY"/JT

=> s e4

L3          283 "AGRICULTURAL AND BIOLOGICAL CHEMISTRY"/JT
                  ("AGRICULTURAL AND BIOLOGICAL CHEMISTRY"/JT)

=> s l1 and l3

L4            0 L1 AND L3

=> d pd 283 l3

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ABS ---- AB
ALL ---- AN, DN, TI, CM, AU, CS, NC, SO, CY, DT, LA, FS, OS, EM, EW,
         AB, CT, RN, CN, NA, GEN
BIB ---- AN, DN, TI, CM, AU, CS, NC, SO, CY, DT, LA, FS, OS, EM, EW
CBIB --- AN, DN, TI, CM, AU, CS, NC, SO, CY, DT, LA, FS, OS, EM, EW
DALL --- AN, DN, TI, CM, AU, CS, NC, SO, CY, DT, LA, FS, OS, EM, EW,
         AB, CT, RN, CN, NA, GEN
IABS --- AB
IALL --- AN, DN, TI, CM, AU, CS, NC, SO, CY, DT, LA, FS, OS, EM, EW,
         AB, CT, RN, CN, NA, GEN
IBIB --- AN, DN, TI, CM, AU, CS, NC, SO, CY, DT, LA, FS, OS, EM, EW
IND ---- CT, RN, CN, NA, GEN
SAM ---- TI, CM, CT, RN, CN, NA, GEN
TRI ---- TI, CM, CT, RN, CN, NA, GEN
TRIAL -- TI, CM, CT, RN, CN, NA, GEN
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KWIC --- All hit terms plus 20 words on either side
OCC ---- List of display fields containing hit terms

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=> d py 283 l3


L3   ANSWER 283 OF 283  MEDLINE
PY   1990

=> file caplus

COST IN U.S. DOLLARS                               SINCE FILE      TOTAL
                                                        ENTRY    SESSION
FULL ESTIMATED COST                                      1.20       1.35

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FILE COVERS 1967 - 24 Nov 1998  VOL 129 ISS 22
FILE LAST UPDATED: 24 Nov 1998  (981124/ED)

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=> d his


     (FILE 'HOME' ENTERED AT 10:53:07 ON 24 NOV 1998)

     FILE 'MEDLINE' ENTERED AT 10:53:14 ON 24 NOV 1998
                E NOBUHARA M/AU
L1           37 S E3
                E AGRIC?/JT
L2            0 S L1 AND E4
L3          283 S E4
L4            0 S L1 AND L3

     FILE 'CAPLUS' ENTERED AT 10:55:37 ON 24 NOV 1998

=> s l4

              3 "NOBUHARA M"/AU
              0 "AGRICULTURAL AND BIOLOGICAL CHEMISTRY"/JT
L5            0 L1 AND L3

=> e agric?/jt

E1            6      AGRIC VET CHEM/JT
E2          269      AGRIC WASTES/JT
E3            0 --> AGRIC?/JT
E4           13      AGRICULTURA HEVERLEE BELG/JT
E5           13      AGRICULTURA LISBON/JT
E6           34      AGRICULTURA LOUVAIN/JT
E7            3      AGRICULTURE LONDON/JT
E8           12      AGRICULTURE MONTREAL/JT
E9            1      AGRICULTURE PARIS/JT
E10          39      AGRO ECOSYSTEMS/JT
E11         136      AGRO FOOD IND HI TECH/JT
E12          20      AGRO SUR/JT

=> e back agric?/jt

E1           13      AGRICULTURA LISBON/JT
E2           13      AGRICULTURA HEVERLEE BELG/JT
E3            0 --> AGRIC?/JT
E4          269      AGRIC WASTES/JT
E5            6      AGRIC VET CHEM/JT
E6            2      AGRIC TROP/JT
E7          116      AGRIC TEC SANTIAGO/JT
E8            7      AGRIC TEC MEX/JT
E9            1      AGRIC SERV BULL F A O/JT
E10           4      AGRIC SCI PROG/JT
E11          70      AGRIC SCI FINL/JT
E12         130      AGRIC SCI DIG/JT

=> e

E13          16      AGRIC REV MAN WEST SER U S DEP AGRIC SCI EDUC ADM/JT
E14         389      AGRIC RES REV/JT
E15           3      AGRIC RES RESULTS SOUTH SER U S DEP AGRIC SCI EDUC ADM
                     /JT
E16           2      AGRIC RES RESULTS SOUTH SER/JT
E17           4      AGRIC RES RESULTS NORTHEAST SER ARR NE U S DEP AGRIC S
                     CI EDUC ADM/JT
E18           1      AGRIC RES RESULTS NORTHEAST SER/JT
E19           3      AGRIC RES MAN U S DEP AGRIC SCI EDUC ADM/JT
E20         137      AGRIC RES J KERALA/JT
E21           1      AGRIC RES DEV/JT
E22          37      AGRIC PAK/JT
E23           6      AGRIC MANAGE WATER QUAL PAP NATL CONF/JT
E24           1      AGRIC MANAGE PRACT EFF REDUCT RUNOFF SEDIMENT PROD/JT

=> e

E25           3      AGRIC ITAL ROME/JT
E26         114      AGRIC ITAL PISA/JT
E27           6      AGRIC INTENSIVE QUAL EAUX/JT
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E28          7      AGRIC GAZ N S W/JT
E29         61      AGRIC FOR BULL/JT
E30         24      AGRIC FOOD SCI FINL/JT
E31          9      AGRIC FOOD CHEM PAST PRESENT FUTURE PAP AM CHEM SOC CE
                    NTEN MEET/JT
E32         79      AGRIC FOOD CHEM CONSUM PROC EUR CONF FOOD CHEM 5TH/JT
E33         74      AGRIC ENVIRON/JT
E34          6      AGRIC ENERGY PROC CONF/JT
E35        401      AGRIC ECOSYST ENVIRON/JT
E36         17      AGRIC BULL/JT

=> e

E37         10      AGRIC BIOTECHNOL/JT
E38       9769      AGRIC BIOL CHEM/JT
E39         17      AGRIC ANHYDROUS AMMONIA TECHNOL USE PROC SYMP/JT
E40        237      AGRIBIOL RES/JT
E41         12      AGRI HORT GENET/JT
E42        561      AGRESSOLOGIE/JT
E43          6      AGREGATION PLAQUETTAIRE RAPP CONGR FR MED 40TH/JT
E44          6      AGRARTVD EGYET KOZLEM GODOLLO/JT
E45         28      AGRARTUD KOZLEM/JT
E46         29      AGRARTUD KOZL/JT
E47          8      AGRARTUD EGYET KOZLEM GODOLLO/JT
E48         32      AGRARTUD EGYET KOZLEM/JT

=> s e38

L6          9769 "AGRIC BIOL CHEM"/JT

=> d his

     (FILE 'HOME' ENTERED AT 10:53:07 ON 24 NOV 1998)

     FILE 'MEDLINE' ENTERED AT 10:53:14 ON 24 NOV 1998
                E NOBUHARA M/AU
L1           37 S E3
                E AGRIC?/JT
L2            0 S L1 AND E4
L3          283 S E4
L4            0 S L1 AND L3

     FILE 'CAPLUS' ENTERED AT 10:55:37 ON 24 NOV 1998
L5            0 S L4
                E AGRIC?/JT
                E BACK AGRIC?/JT
L6         9769 S E38

=> s l1 and l6

              3 "NOBUHARA M"/AU
L7            0 L1 AND L6

=> s l6 and nobuhara ?/au

            310 NOBUHARA ?/AU
L8            6 L6 AND NOBUHARA ?/AU

=> d au ti so 1-6


L8   ANSWER 1 OF 6  CAPLUS  COPYRIGHT 1998 ACS
AU   Suemitsu, Rikisaku; Ohnishi, Keiichiro;   ***Nobuhara, Toshiaki***
     ; Horiuchi, Masayuki; Horiuchi, Kenichi
TI   Studies on the metabolic products of Alternaria porri.  Part 16.
     Isolation and identification of tentoxin from Alternaria porri
     (Ellis) Ciferri
SO     ***Agric. Biol. Chem.***   (1990), 54(9), 2449-50
     CODEN: ABCHA6; ISSN: 0002-1369

L8   ANSWER 2 OF 6  CAPLUS  COPYRIGHT 1998 ACS
AU     ***Nobuhara, Masahiro***  ; Morishita, Hideaki; Tohyama, Junichi;
     Ogino, Hiromi; Nii, Atsushi; Nagase, Yasukazu; Kanamori, Toshinori
TI   Increased expression in Escherichia coli of human tumor necrosis
     factor through in vitro mutagenesis around the initiation codon
SO     ***Agric. Biol. Chem.***   (1988), 52(6), 1331-8
     CODEN: ABCHA6; ISSN: 0002-1369

L8   ANSWER 3 OF 6  CAPLUS  COPYRIGHT 1998 ACS
AU   Imai, Hiroyuki; Aishima, Tetsuo;   ***Nobuhara, Akio***
TI   Key factors in "katsuobushi" (dried bonito) aroma formation
SO     ***Agric. Biol. Chem.***   (1982), 46(2), 419-28
     CODEN: ABCHA6; ISSN: 0002-1369

L8   ANSWER 4 OF 6  CAPLUS  COPYRIGHT 1998 ACS
AU   Aishima, Tetsuo;   ***Nobuhara, Akio***
TI   Analysis of gas chromatographic profiles of "Katsuobushi" (dried
     bonito) flavor by pattern similarity analysis method
SO     ***Agric. Biol. Chem.***   (1977), 41(10), 1841-6
     CODEN: ABCHA6

L8   ANSWER 5 OF 6  CAPLUS  COPYRIGHT 1998 ACS
AU   Aishima, Tetsuo;   ***Nobuhara, Akio***
TI   Evaluation of soy sauce flavor by stepwise multiple regression
     analysis of gas chromatographic profiles
SO     ***Agric. Biol. Chem.***   (1976), 40(11), 2159-67
     CODEN: ABCHA6

L8   ANSWER 6 OF 6  CAPLUS  COPYRIGHT 1998 ACS
AU     ***Nobuhara, Akio***  ; Matsui, Masanao
TI   Syntheses of compounds possessing chicken flavor
SO     ***Agric. Biol. Chem.***   (1966), 30(11), 1087-9
     CODEN: ABCHA6

=> d his; log y

     (FILE 'HOME' ENTERED AT 10:53:07 ON 24 NOV 1998)

     FILE 'MEDLINE' ENTERED AT 10:53:14 ON 24 NOV 1998
                E NOBUHARA M/AU
L1           37 S E3
                E AGRIC?/JT
L2            0 S L1 AND E4
L3          283 S E4
L4            0 S L1 AND L3

     FILE 'CAPLUS' ENTERED AT 10:55:37 ON 24 NOV 1998
L5            0 S L4
                E AGRIC?/JT
                E BACK AGRIC?/JT
L6         9769 S E38
L7            0 S L1 AND L6
L8            6 S L6 AND NOBUHARA ?/AU

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                      12.44      13.79

STN INTERNATIONAL LOGOFF AT 10:58:02 ON 24 NOV 1998

FILE 'USPAT' ENTERED AT 11:45:02 ON 24 NOV 1998

  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *              W E L C O M E   T O   T H E                     *
  *         U. S.   P A T E N T   T E X T   F I L E              *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

=> s (method and (osteoporosis or osteoarthritis or arthrosteitis))/clm

        593144 METHOD/CLM
           410 OSTEOPOROSIS/CLM
           150 OSTEOARTHRITIS/CLM
             0 ARTHROSTEITIS/CLM
L1         489 (METHOD AND (OSTEOPOROSIS OR OSTEOARTHRITIS OR ARTHROSTEITI
S))
               /CLM

=> e arthrosteitis

E#     FILE           FREQUENCY  TERM
--     ----           ---------  ----
E1     USPAT                1    ARTHROSPRIRA/BI
E2     USPAT                1    ARTHROSSCOPICALLY/BI
E3     USPAT                5 --> ARTHROSTEITIS/BI
E4     USPAT                3    ARTHROTEK/BI
E5     USPAT                2    ARTHROTHAMNUS/BI
E6     USPAT                9    ARTHROTIC/BI
E7     USPAT                2    ARTHROTICALLY/BI
E8     USPAT                1    ARTHROTIS/BI
E9     USPAT                2    ARTHROTOME/BI
E10    USPAT                3    ARTHROTOMIC/BI
E11    USPAT               10    ARTHROTOMIES/BI
E12    USPAT                1    ARTHROTOMOGRAMS/BI

=> s e3

L2             5 ARTHROSTEITIS/BI

=> bib ab 1- kwic

'BIB' IS NOT A RECOGNIZED COMMAND

=> d bib ab kwic 1-


US PAT NO:      5,683,992 [IMAGE AVAILABLE]             L2: 1 of 5
DATE ISSUED:    Nov. 4, 1997
TITLE:          Pharmaceutical applications for methanediphosphonate
                  derivative
INVENTOR:       Norio Kawabe, Kamakura, Japan
                Hiromi Uchiro, Kamakura, Japan
                Teruo Nakadate, Yokohama, Japan
                Masahiko Tanahashi, Kamakura, Japan
                Masatoshi Ito, Yokohama, Japan
ASSIGNEE:       Toray Industries, Inc., Japan (foreign corp.)
APPL-NO:        08/617,937
DATE FILED:     Mar. 15, 1996
ART-UNIT:       121
PRIM-EXMR:      Michael G. Ambrose
LEGAL-REP:      Austin R. Miller

US PAT NO:      5,683,992 [IMAGE AVAILABLE]             L2: 1 of 5
```

ABSTRACT:
The present invention relates to a methanediphosphonate derivative, its manufacturing process, and pharmaceutical applications, that is represented with the following formula: ##STR1## wherein, D is either sulfur, oxygen, NH, alkyl-substituted N, CH.sub.2, or SCH.sub.2, X represents an alkyl group, alkyl group having a hetero atom as a substitution group, an aryl group or an acyl group, m represents an integer of 1 to 5, and R.sup.1, R.sup.2, R.sup.3 and R.sup.4 independently represent hydrogen, alkyl groups having 1 to carbon atoms or pharmaceutically allowable cations. .function.The compounds of the present invention have excellent IL-1 inhibitory action, antioxidation action and bone resorption inhibitory action, and are useful as antiinflammatory agents, antirheumatic agents, bone metabolic disease drugs, autoimmune disease drugs, or osteoporosis drugs.

SUMMARY:

BSUM(34)

Those . . . activity against (chronic) articular rheumatism, multiple rheumatoid arthritis, osteoarthritis, scapular periarthritis, neck-shoulder-arm syndrome, intervertebral disk disorders, lumbago, tendonitis and peritendonitis, **arthrosteitis**, scapulohumero-periarthritis, fibrositis, muscle pain, neuralgia, gout, post-surgical and posttraumatic inflammation and swelling (antiinflammatory agents, antirheumatics, antiarthritics, analgesics and antipyretics), or. . .

```
US PAT NO:      5,618,804 [IMAGE AVAILABLE]             L2: 2 of 5
DATE ISSUED:    Apr. 8, 1997
TITLE:          Methanediphosphonic acid derivative, process for
                  production thereof and use for pharmaceuticals
INVENTOR:       Norio Kawabe, Fujisawa, Japan
                Hiromi Uchiro, Kamakura, Japan
                Teruo Nakadate, Yokohama, Japan
                Masahiko Tanahashi, Kamakura, Japan
                Yuriko Funaba, Fujisawa, Japan
ASSIGNEE:       Toray Industries, Inc., Tokyo, Japan (foreign corp.)
APPL-NO:        08/178,320
DATE FILED:     Jan. 14, 1994
ART-UNIT:       121
PRIM-EXMR:      Johann Richter
ASST-EXMR:      Michael Ambrose
LEGAL-REP:      Birch, Stewart, Kolasch & Birch

US PAT NO:      5,618,804 [IMAGE AVAILABLE]             L2: 2 of 5
```

ABSTRACT:

A methane diphosphonic acid derivative represented by the general formula (I): ##STR1## wherein, X and Y are defined in the specification; m represents an integer of 0 to 3; n represents an integer of 0 to 4; and each X of the (X).sub.m and each Y of the (Y).sub.n may be either identical or different; . . . represents a double bond or single bond; A is --(CH.sub.2)a--(D)b--(CH.sub.2)c-- (wherein D is sulfur, oxygen, NH, alkyl-substituted N, or CH.sub.2, a and c are integers of 0 to 10 and b is 0 or 1), or --(CH.dbd.CH)d.dbd.CH= (wherein d is an integer of 0 to 2, and B does not exist when A represents --CH.dbd.CH)d--CH.dbd.), B refers to a hydrogen atom, alkyl group, amino group, monoalkylamino group, dialkylamino group, acylamino group, hydroxyl group, alkoxy group, trialkylsiloxy group or acyloxy group, and each of R.sup.1, R.sup.2, R.sup.3 and R.sup.4 is hydrogen atom, straight or branched alkyl group having 1 to 7 carbon atoms, or pharmacologically allowed cation, and these may be identical or different, as described. The compounds of the present invention have excellent IL-1 inhibitory action, antioxidative action and bone resorption inhibitory action, and are useful as an antiinflammatory drug, antirheumatic drug, or autoimmune disease drug.

DETDESC:

DETD(18)

Those . . . preventive activity against (chronic) articular rheumatism, rheumatoid polyarthritis, osteoarthritis, scapular periarthritis, neck-shoulder-arm syndrome, intervertebral disk disorders, lumbago, tendinitis and peritendinitis, **arthrosteitis**, stiff and painful shoulder, fibrositis, muscle pain, neuralgia, gout, post-surgical and posttraumatic inflammation and swelling (antiinflammatory drugs, antirheumatic drugs, antiarthritic. . .

```
US PAT NO:      5,527,940 [IMAGE AVAILABLE]             L2: 3 of 5
DATE ISSUED:    Jun. 18, 1996
TITLE:          Methanediphosphonate derivative, its manufacturing process
                  and its pharmaceutical applications
INVENTOR:       Norio Kawabe, Kamakura, Japan
                Hiromi Uchiro, Kamakura, Japan
                Teruo Nakadate, Yokohama, Japan
                Masahiko Tanahashi, Kamakura, Japan
                Masatoshi Ito, Yokohama, Japan
ASSIGNEE:       Toray Industries, Inc., Japan (foreign corp.)
APPL-NO:        08/340,819
DATE FILED:     Nov. 17, 1994
ART-UNIT:       121
PRIM-EXMR:      Johann Richter
ASST-EXMR:      Michael G. Ambrose
LEGAL-REP:      Austin R. Miller

US PAT NO:      5,527,940 [IMAGE AVAILABLE]             L2: 3 of 5
```

ABSTRACT:
The present invention relates to a methanediphosphonate derivative, its manufacturing process and pharmaceutical applications, that is represented with the following formula: ##STR1## (wherein, B is either hydrogen, an alkyl group, hydroxyl group, alkoxy group or amino group, D is either sulfur, oxygen, NH, alkyl-substituted N, CH.sub.2 or SCH.sub.2, X represents an alkyl group, alkyl group having a hetero atom as a substitution group, an aryl group or an acyl group, m represents an integer of 1 to 5, and R.sup.1, R.sup.2, R.sup.3 and R.sup.4 independently represent hydrogen, alkyl groups having 1 to 7 carbon atoms or pharmaceutically allowable cations). The compound of the present invention has excellent IL-1 inhibitory action, antioxidation action and bone resorption inhibitory action, and is useful as an antiinflammatory agent, antirheumatic, bone metabolic disease drug, autoimmune disease drug, osteoporosis drug and so forth.

SUMMARY:

BSUM(37)

Those . . . activity against (chronic) articular rheumatism, multiple rheumatoid arthritis, osteoarthritis, scapular periarthritis, neck-shoulder-arm syndrome, intervertebral disk disorders, lumbago, tendonitis and peritendonitis, **arthrosteitis**, scapulohumero-periarthritis, fibrositis, muscle pain, neuralgia, gout, post-surgical and posttraumatic inflammation and swelling (antiinflammatory agents, antirheumatics, antiarthritics, analgesics and antipyretics), or. . .

```
US PAT NO:      5,319,100 [IMAGE AVAILABLE]             L2: 4 of 5
DATE ISSUED:    Jun. 7, 1994
TITLE:          3-benzylidene-1-carbamoyl-2-pyrrolidone analogues
INVENTOR:       Susumu Kamata, Hyogo, Japan
                Takeshi Shiota, Kyoto, Japan
                Nobuhiro Haga, Osaka, Japan
                Toshihiko Okada, Nara, Japan
                Hirokuni Jyoyama, Nara, Japan
                Saichi Matsumoto, Osaka, Japan
ASSIGNEE:       Shionogi Seiyaku Kabushiki Kaisha, Osaka, Japan (foreign
                  corp.)
APPL-NO:        08/033,342
DATE FILED:     Mar. 18, 1993
ART-UNIT:       121
PRIM-EXMR:      Joseph Paul Brust
LEGAL-REP:      Wenderoth, Lind & Ponack

US PAT NO:      5,319,100 [IMAGE AVAILABLE]             L2: 4 of 5
```

ABSTRACT:
The present invention relates to novel 3-benzylidene-1-carbamoyl-2-pyrroridone analogues having advantage anti-inflammatory activities, which is represented by the formula: ##STR1## wherein R.sup.1 and R.sup.2 each is independently hydrogen, alkyl, alkoxy, or halogen; R.sup.3 is hydrogen or acyl; R.sup.4 is hydrogen, alkyl, hydroxy, alkoxy, cyano, or halogen; R.sup.5 and R.sup.6 each is independently hydrogen, alkyl, aryl, aralkyl, heterocyclic group, substituted or unsubstituted amino, or OR.sup.7 wherein R.sup.7 is hydrogen, alkyl, aryl, acyl, or aralkyl, or taken together with the adjacent nitrogen atom may form heterocyclic group which may contain N, O, and/or S, and X and Y each is independently O, S, substituted or unsubstituted imino, or substituted or unsubstituted methylene. In more detail, the present invention provides an anti-inflammatory agent which is useful for the treatment of chronic inflammation and has little side effect, e.g., stomach disease.

SUMMARY:

BSUM(4)

Prior . . . being no effective to progressed rheumatic diseases such as osteonecrosis, the improvement in chronic rheumatic diseases, or the treatment of **arthrosteitis** etc., and of having potent activities to induce gastric ulcer caused by the inhibition of the production of prostaglandin E.sub.2. . .

US PAT NO: 5,319,099 [IMAGE AVAILABLE] L2: 5 of 5
DATE ISSUED: Jun. 7, 1994
TITLE: 3-benzylidene-1-carbamoyl-2-pyrrolidone compounds useful as antiinflammatory agents
INVENTOR: Susumu Kamata, Hyogo, Japan
Takeshi Shiota, Kyoto, Japan
Nobuhiro Haga, Osaka, Japan
Toshihiko Okada, Nara, Japan
Hirokuni Jyoyama, Nara, Japan
Saichi Matsumoto, Osaka, Japan
ASSIGNEE: Shionogi Seiyaku Kabushiki Kaisha, Osaka, Japan (foreign corp.)
APPL-NO: 07/862,761
DATE FILED: Jun. 24, 1992
ART-UNIT: 121
PRIM-EXMR: Floyd D. Higel
LEGAL-REP: Wenderoth, Lind & Ponack

US PAT NO: 5,319,099 [IMAGE AVAILABLE] L2: 5 of 5

ABSTRACT:

The present invention relates to novel 3-benzylidene-1-carbamoyl-2-pyrrolidone analogues having advantage anti-inflammatory activities, which is represented by the formula: ##STR1## wherein R.sup.1 and R.sup.2 each is independently hydrogen, alkyl, alkoxy, or halogen; R.sup.3 is hydrogen or acyl; R.sup.4 is hydrogen, alkyl, hydroxy, alkoxy, cyano, or halogen; R.sup.5 and R.sup.6 each is independently hydrogen, alkyl, aryl, aralkyl, heterocyclic group, substituted or unsubstituted amino, or OR.sup.7 wherein R.sup.7 is hydrogen, alkyl, aryl, acyl, or aralkyl, or taken together with the adjacent nitrogen atom may form heterocyclic group which may contain N, O, and/or S, and X and Y each is independently O, S, substituted or unsubstituted imino, or substituted or unsubstituted methylene. In more detail, the present invention provides an anti-inflammatory agent which is useful for the treatment of chronic inflammation and has little side effect, e.g., stomach disease.

SUMMARY:

BSUM(4)

Prior . . . being no effective to progressed rheumatic diseases such as osteonecrosis, the improvement in chronic rheumatic diseases, or the treatment of **arthrosteitis** etc., and of having potent activities to induce gastric ulcer caused by the inhibition of the production of prostaglandin E.sub.2. . .

=> d bsum(34)

US PAT NO: 5,683,992 [IMAGE AVAILABLE] L2: 1 of 5

SUMMARY:

BSUM(34)

Those diseases at which compounds of the present invention are directed are inflammatory diseases, pain diseases, skin diseases, respiratory organ diseases, liver diseases, infections, autoimmune diseases, ischemic organ disorders and bone metabolic diseases. For example, the present invention provides a drug having superior therapeutic and preventive activity against (chronic) articular rheumatism, multiple rheumatoid arthritis, osteoarthritis, scapular periarthritis, neck-shoulder-arm syndrome, intervertebral disk disorders, lumbago, tendonitis and peritendonitis, **arthrosteitis**, scapulohumero-periarthritis, fibrositis, muscle pain, neuralgia, gout, post-surgical and posttraumatic inflammation and swelling (antiinflammatory agents, antirheumatics, antiarthritics, analgesics and antipyretics), or psoriasis, asthma, pulmonary sarcoidosis, viral hepatitis, human immunodeficiency viral infections, protozoan infections, ischemic heart disease, ischemic encephalopathy, ischemic hepatitis, arteriosclerosis and osteoporosis, Paget's disease, Bechterew's disease, hypercalcemia and ectopic ossification (bone metabolic disease drugs).

=> d bsum(4) 4

US PAT NO: 5,319,100 [IMAGE AVAILABLE] L2: 4 of 5

SUMMARY:

BSUM(4)

Prior anti-inflammatory agents of non-steroid type are effective to the improvement in the early stages of rheumatism and acute inflammation, however, have some defects of being no effective to progressed rheumatic diseases such as osteonecrosis, the improvement in chronic rheumatic diseases, or the treatment of **arthrosteitis** etc., and of having potent activities to induce gastric ulcer caused by the inhibition of the production of prostaglandin E.sub.2 (PGE.sub.2).

=> e rheumati?

E#	FILE	FREQUENCY	TERM
E1	USPAT	3	RHEUMATHERAPY/BI
E2	USPAT	6	RHEUMATHOID/BI
E3	USPAT	0 -->	RHEUMATI?/BI
E4	USPAT	2177	RHEUMATIC/BI
E5	USPAT	21	RHEUMATICA/BI
E6	USPAT	1	RHEUMATICAL/BI
E7	USPAT	17	RHEUMATICALLY/BI
E8	USPAT	32	RHEUMATICS/BI
E9	USPAT	28	RHEUMATIOD/BI
E10	USPAT	2	RHEUMATIODAL/BI
E11	USPAT	1	RHEUMATIOID/BI
E12	USPAT	1	RHEUMATIS/BI

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E13	USPAT	2	RHEUMATISIM/BI
E14	USPAT	1336	RHEUMATISM/BI
E15	USPAT	16	RHEUMATISMAL/BI
E16	USPAT	1	RHEUMATISMANDOEDEMAS/BI
E17	USPAT	1	RHEUMATISMATIC/BI
E18	USPAT	37	RHEUMATISMS/BI
E19	USPAT	1	RHEUMATODI/BI
E20	USPAT	1	RHEUMATODIAL/BI
E21	USPAT	7	RHEUMATOGENIC/BI
E22	USPAT	2	RHEUMATOGY/BI
E23	USPAT	1	RHEUMATOI/BI
E24	USPAT	7	RHEUMATOIC/BI

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E25	USPAT	6881	RHEUMATOID/BI
E26	USPAT	14	RHEUMATOIDAL/BI
E27	USPAT	5	RHEUMATOIDARTHRITIS/BI
E28	USPAT	3	RHEUMATOIDE/BI
E29	USPAT	1	RHEUMATOIDFACTOR/BI
E30	USPAT	1	RHEUMATOIDS/BI
E31	USPAT	1	RHEUMATOIDTYPE/BI
E32	USPAT	229	RHEUMATOL/BI
E33	USPAT	1	RHEUMATOLAGY/BI
E34	USPAT	3	RHEUMATOLD/BI
E35	USPAT	1	RHEUMATOLOG/BI
E36	USPAT	28	RHEUMATOLOGIC/BI

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E37	USPAT	1	RHEUMATOLOGICA/BI
E38	USPAT	44	RHEUMATOLOGICAL/BI
E39	USPAT	1	RHEUMATOLOGICALLY/BI
E40	USPAT	1	RHEUMATOLOGIE/BI
E41	USPAT	18	RHEUMATOLOGIST/BI
E42	USPAT	41	RHEUMATOLOGISTS/BI
E43	USPAT	236	RHEUMATOLOGY/BI
E44	USPAT	1	RHEUMATON/BI
E45	USPAT	3	RHEUMATORID/BI
E46	USPAT	1	RHEUMATORLOGIST/BI
E47	USPAT	4	RHEUMATORY/BI
E48	USPAT	2	RHEUMATOSIS/BI

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E49	USPAT	6	RHEUMATREX/BI
E50	USPAT	1	RHEUMATUID/BI
E51	USPAT	1	RHEUMETALOGIC/BI
E52	USPAT	1	RHEUMETER/BI
E53	USPAT	1	RHEUMETIODAL/BI
E54	USPAT	2	RHEUMETISM/BI
E55	USPAT	6	RHEUMETOID/BI
E56	USPAT	1	RHEUMETOLOGY/BI
E57	USPAT	3	RHEUMFORSCH/BI
E58	USPAT	2	RHEUMITOID/BI
E59	USPAT	1	RHEUMNATOID/BI
E60	USPAT	1	RHEUMNATOLOGICAL/BI

=> e

E61	USPAT	1	RHEUMOCARDITIS/BI
E62	USPAT	1	RHEUMOID/BI
E63	USPAT	3	RHEUMON/BI
E64	USPAT	1	RHEUMOTHERAPY/BI
E65	USPAT	4	RHEUMOTOID/BI
E66	USPAT	1	RHEUMOTOLOGY/BI
E67	USPAT	1	RHEUMOX/BI
E68	USPAT	1	RHEUMS/BI
E69	USPAT	1	RHEUMSTOLOGY/BI
E70	USPAT	4	RHEUMTOID/BI
E71	USPAT	2	RHEUNEO/BI
E72	USPAT	2	RHEUNIUM/BI

=> e

E73	USPAT	1	RHEUON/BI
E74	USPAT	2	RHEUS/BI
E75	USPAT	1	RHEUSUS/BI
E76	USPAT	1	RHEUTAMOID/BI
E77	USPAT	2	RHEUTHENIUM/BI
E78	USPAT	1	RHEUTHIUM/BI
E79	USPAT	3	RHEVIBRON/BI
E80	USPAT	3	RHEVUM/BI
E81	USPAT	1	RHEWN/BI
E82	USPAT	2	RHEWUM/BI
E83	USPAT	1	RHEWUN/BI
E84	USPAT	1	RHEXIDINE/BI

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(FILE 'USPAT' ENTERED AT 11:45:02 ON 24 NOV 1998)
L1 489 S (METHOD AND (OSTEOPOROSIS OR OSTEOARTHRITIS OR ARTHROSTE
ITI E ARTHROSTEITIS
L2 5 S E3
E RHEUMATI?

=> s (method and (rheumatic? or RHEUMATISM? or RHEUMATOID?))/clm

593144 METHOD/CLM
149 RHEUMATIC?/CLM
82 RHEUMATISM?/CLM
703 RHEUMATOID?/CLM
L3 834 (METHOD AND (RHEUMATIC? OR RHEUMATISM? OR RHEUMATOID?))/CLM

=> s (method and ((radicular or arvecular)(2a)defect#))/clm

593144 METHOD/CLM
18 RADICULAR/CLM
0 ARVECULAR/CLM
5499 DEFECT#/CLM
0 (RADICULAR OR ARVECULAR)(2A)DEFECT#
L4 0 (METHOD AND ((RADICULAR OR ARVECULAR)(2A)DEFECT#))/CLM

=> e arvecular

E#	FILE	FREQUENCY	TERM
E1	USPAT	7	ARVE/BI
E2	USPAT	1	ARVEC/BI
E3	USPAT	0 -->	ARVECULAR/BI
E4	USPAT	1	ARVED/BI
E5	USPAT	2	ARVEDI/BI
E6	USPAT	2	ARVEDSON/BI
E7	USPAT	4	ARVEE/BI
E8	USPAT	4	ARVEILER/BI
E9	USPAT	6	ARVEILLER/BI
E10	USPAT	1	ARVEL/BI
E11	USPAT	3	ARVELA/BI
E12	USPAT	1	ARVELI%/BI

=> s (method and radicular)/clm

593144 METHOD/CLM
18 RADICULAR/CLM
L5 3 (METHOD AND RADICULAR)/CLM

=> d bib ab clm 1-

US PAT NO: 5,630,307 [IMAGE AVAILABLE] L5: 1 of 3
DATE ISSUED: May 20, 1997
TITLE: Method and a quick-opening wrapping for objects
INVENTOR: Georges Cathala, Bernay, France
ASSIGNEE: Generale de Grandes Sources, Paris, France (foreign corp.)
APPL-NO: 08/382,037
DATE FILED: Feb. 27, 1995
ART-UNIT: 321
PRIM-EXMR: John Sipos
ASST-EXMR: Ed Tolan
LEGAL-REP: Hazel & Thomas

US PAT NO: 5,630,307 [IMAGE AVAILABLE] L5: 1 of 3

ABSTRACT:

The invention relates to a method of making a quick-opening wrapping for packaging objects, characterized in that it comprises the following steps:
an embrittling agent is added to at least one extrudable plastics material;
a monolayer film is made from said composition by monoextrusion; and said objects are surrounded at least in part by a portion of said film, and tear initiator means are provided in said portion of the film whereby it is possible to tear said wrapping in the direction that is predetermined by said initiator.

CLAIMS:

CLMS(1)

What is claimed is:

1. A **method** of making a quick-opening wrapping for packing objects, comprising the steps of:
preparing a composition by adding an embrittling agent to at least one extrudable plastics material, the concentration by weight of said embrittling agent being within the range of 5% to 30%;
monoextruding said composition by blow extrusion with a take-off ratio within the range of 1.5 to 30 and a blow-up ratio within the range of 1.5 to 5, whereby the extruded film is tearable in the extrusion direction and in a direction orthogonal to the extrusion direction; and
surrounding at least in part said objects by a portion of said film, and providing tear initiator means in said portion of said film whereby it is possible to tear said wrapping in the direction that is predetermined by said initiator.

CLMS(2)

2. The **method** according to claim 1, wherein said embrittling agent is an ionomer based on an acid copolymer.

CLMS(3)

3. The **method** according to claim 2, wherein said ionomer is based on an acrylic or a methacrylic acid precursor neutralized by cations.

CLMS(4)

4. The **method** according to claim 3, wherein said cations are selected from the group consisting of zinc and sodium cations.

CLMS(5)

5. The **method** according to claim 2, wherein said acid copolymer is selected from the group consisting of ethylene acid and ethylene methacrylic acid.

CLMS(6)

6. The **method** according to claim 5, wherein said acid copolymer is at least partially neutralized with zinc or sodium cations.

CLMS(7)

7. The **method** according to claim 1, wherein said base plastics material is constituted by a plastics material selected from the group consisting of **radicular** polyethylenes, linear polyethylenes, and high density polyethylenes.

CLMS(8)

8. The **method** according to claim 7, wherein the plastics material is constituted by a mixture of at least two of said compounds.

CLMS(9)

9. The **method** according to claim 1, wherein the melt index of the components used lies in the range 0.2 to 15.

CLMS(10)

10. The **method** according to claim 9, wherein the melt index of the components used lies in the range 0.2 to 2, whereby said film is shrinkable.

CLMS(11)

11. A **method** of making a quick-opening wrapping for packing objects, comprising the steps of:
preparing a composition by adding an embrittling agent to at least one extrudable plastics material, the concentration by weight of said embrittling agent being within the range of 15% to 25%;
monoextruding said composition by blow extrusion with a take-off ratio within the range of 1.5 to 30 and a blow-up ratio with in the range of 1.5 to 10, whereby the extruded film is tearable in the extrusion direction and in a direction orthogonal to the extrusion direction; and
surrounding at least in part said objects by a portion of said film, and providing tear initiator means in said portion of said film whereby it is possible to tear said wrapping in the direction that is predetermined by said initiator.

CLMS(12)

12. The **method** according to claim 1, wherein the thickness of the monoextruded film is within the range of 20 to 150 microns.

CLMS(13)

13. The **method** according to claim 11, wherein the thickness of the monoextruded film is within the range of 20 to 150 microns.

US PAT NO: 4,622,011 [IMAGE AVAILABLE] L5: 2 of 3
DATE ISSUED: Nov. 11, 1986
TITLE: Radicular post head comprising reversible retention and automatic positioning means
INVENTOR: Pierre Malek, 62, boulevard Gambetta, 06000 Nice, France
APPL-NO: 06/643,617
DATE FILED: Aug. 17, 1984
ART-UNIT: 333
PRIM-EXMR: John J. Wilson
LEGAL-REP: Dowell & Dowell

US PAT NO: 4,622,011 [IMAGE AVAILABLE] L5: 2 of 3

ABSTRACT:

A radicular post cooperating with a resilient dental impression for use in preparing a cap to be fixed to a tooth having a post hole shaped to receive the post, each post having a conical part for entering the post hole and having a cylindrical part aligned on the longitudinal axis of the post and extending from the tooth when the post is seated in the post hole, the cylindrical parts of the posts having retention grooves circularly disposed around them, the parts of the posts being fully symmetrical about the axis; and the impression being formed of a cured resilient compound having a molded hole fitting the cylindrical part of each post, and the impression holes having resilient rings shaped to enter and fill the grooves in associated posts, the shapes of the grooves and rings and the resilience of the impression compound being selected such that the cylindrical parts of the posts can be removed from and re-positioned within the holes in the impressions without damaging the impressions and while achieving accurate positioning of the posts therein because the parts of the posts are symmetrical about their axes.

CLAIMS:

CLMS(1)

I claim:

1. The combination of a **radicular** post and a resilient dental impression for use in preparing a cap to be fixed to a tooth having a post hole shaped to receive the post,
the post comprising a conical part for entering the post hole, the post having a cylindrical part which extends from the tooth when the post is seated in the post hole and the cylindrical part having retention groove means circularly disposed around it, and the conical part and the cylindrical part and the groove means being fully symmetrically disposed about the longitudinal axis of the post; and
the impression comprising a cured resilient compound having a molded hole fitting the cylindrical part of the post, and the impression having resilient ring means in the molded hole shaped to enter and fill the groove means in the post, the shape of the groove means and the resilience of the impression being selected such that the cylindrical part of the post can be removed from and re-positioned within the molded hole in the impression without damaging the impression and while achieving accurate positioning of the post therein because the parts of the post are symmetrical about said longitudinal axis.

CLMS(2)

2. The **method** of preparing a dental impression for making a cap to be fixed to a tooth having a post hole shaped to receive a **radicular** post, comprising the steps of:
installing and seating a post in the post hole, the post having a conical part for entering the post hole and having a cylindrical part to project from the tooth, and the cylindrical part having retention groove means circularly disposed around it, and the conical and cylindrical parts being symmetrically disposed about the longitudinal axis of the post;
molding resilient impression compound over the tooth and the projecting part of the post leaving no voids, whereby to form an impression having an internal hole fitting said cylindrical part of the post and having ring means in the internal hole fitting the groove means; and
removing the molded impression and the post from the tooth, the shape of the groove means and the resilience of the ring means within the impression being selected to provide a reversible lock whereby in the event that the post remains in the tooth during removal of the impression a post which is identical in shape can be reinserted and locked in the internal hole and will be properly positioned therein during subsequent laboratory steps because the parts of the post are symmetrical about its longitudinal axis and thus have no specific orientation in terms of angle of rotation in the impression about said axis.

US PAT NO: 3,636,632 [IMAGE AVAILABLE] L5: 3 of 3
DATE ISSUED: Jan. 25, 1972
TITLE: METHOD OF MAKING DENTAL BRIDGES, DENTAL CROWNS, AND DENTAL CORONO-RADICULAR RETAINERS
INVENTOR: Eugen Costa, Bucharest, Romania
Ioan Covaci, Bucharest, Romania
Gheorghe Surca, Bucharest, Romania
ASSIGNEE: Clinica Si Policlinica de Stomatologie Ortopedica, Bucharest, Romania
APPL-NO: 04/815,925
DATE FILED: Apr. 14, 1969
ART-UNIT: 333
PRIM-EXMR: Robert Peshock
LEGAL-REP: Karl F. Ross

US PAT NO: 3,636,632 [IMAGE AVAILABLE] L5: 3 of 3

ABSTRACT:
A method of making a dental prosthesis, such as a dental bridge, dental crown or corono-radicular retainer wherein a negative cast of the mouth area is formed by surrounding at least part of the area with a copper ring and introducing a casting material into said ring. Thereafter a plaster positive model is formed by introducing plaster into said cast. The model is fixed to the wall of a container and duplicated by casting a hydrocolloid material about the model and withdrawing said model from said hydrocolloid material upon setting to form a reversible hydrocolloid negative impression. An investment material is used to form a positive representation from the investment material and there is built up with a thin layer of wax on said positive representation the configuration of the prosthesis to be fashioned. Then a lost-wax casting mold is formed about the positive representation with the wax layer thereon and a molten metal is cast in the mold to produce the prosthesis.

CLAIMS:

CLMS(1)

We claim:

1. A **method** of making a dental bridge, comprising the steps of:
forming a negative cast of the mouth area adapted to receive said prosthesis with a casting material;
thereafter forming a hard plaster positive model of said region by introducing plaster into only a limited region of said cast corresponding to the tooth-stump area and the alveolary crest area between the two stumps, producing an extended plaster positive model from said cast from which the tooth-stump model is removable, and removing the tooth-stump model from said extended model;
casting a reversible hydrocolloid material about said model and withdrawing said model from said hydrocolloid material upon setting thereof to form a reversible impression;
casting in said negative impression an investment material to form a positive representation from said investment material;
building up a thin layer of wax on said positive representation and shaping said layer to the configuration of the prosthesis to be fashioned; and
forming a lost-wax casting mold about the positive representation with the wax layer thereon and casting a molten metal in said mold to produce the prosthesis, said reversible hydrocolloid negative impression being formed from said tooth-stump model and said positive impression of investment material constituting a duplicate of said tooth-stump model, said tooth-stump model and the duplicate thereof of investment material forming cores corresponding to the teeth on either side of said alveolary crest area and of a dimension less than that of the teeth to be formed on said prosthesis, said thin layer of wax being built on said cores to the anatomical shape of teeth by applying a wax band of predetermined thickness around said cores and a wax disk to the ends of said cores.

CLMS(2)

2. The **method** defined in claim 1 wherein said wax band has a thickness of about 0.4 mm.

CLMS(3)

3. The **method** of making a corono-**radicular** retainer comprising the steps of:
forming a negative cast of the mouth area adapted to receive said prosthesis with a casting material;
thereafter forming a plaster positive model of said region by introducing plaster into said cast;
casting a reversible hydrocolloid material about said model and withdrawing said model from said hydrocolloid material upon setting thereof to form a reversible hydrocolloid negative impression;
casting in said negative impression an investment material to form a positive representation from said investment material;
building up a thin layer of wax on said positive representation and shaping said layer to the configuration of the prosthesis to be fashioned, said layer of wax being applied to said positive representation in the form of a wax band of a predetermined thickness of about 0.4 mm. and
fixing a metallic taper dowel in said model, suspending said model in a container and casting said hydrocolloid material about said model in said container.

CLMS(4)

4. The **method** defined in claim 3 wherein said taper dowel has a threaded end and is fastened to said container by a screwthread into this end, said model being withdrawn from said dowel and said negative impression and said investment material being cast in said negative impression around said dowel.

CLMS(5)

5. A **method** of making a dental prosthesis, such as a dental bridge, dental crown or corono-**radicular** retainer, comprising the steps of:
forming a negative cast of the mouth area adapted to receive said prosthesis with casting material;
thereafter forming a plaster positive model of said region by introducing plaster into said cast;
casting a reversible hydrocolloid material about said model and withdrawing said model from said hydrocolloid material upon setting thereof to form a reversible hydrocolloid negative impression;
casting in said negative impression an investment material to form a positive representation from said investment material;
building up a thin layer of wax on said positive representation and shaping said layer to the configuration of the prosthesis to be fashioned; and
forming a lost-wax casting mold about the positive representation with the wax layer thereon and casting a molten metal in said mold to produce the prosthesis, said model being mounted on a wall of said container and the container is filled with said hydrocolloid material up to said wall and surrounds said model, said molten metal being a chromium-cobalt alloy, said investment material being cured at an elevated temperature prior to the build up of said layer of wax thereon.

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(FILE 'USPAT' ENTERED AT 11:45:02 ON 24 NOV 1998)
L1 489 S (METHOD AND (OSTEOPOROSIS OR OSTEOARTHRITIS OR ARTHROSTE
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L2 5 S E3
E RHEUMATI?
L3 834 S (METHOD AND (RHEUMATIC? OR RHEUMATISM? OR RHEUMATOID?))/
CLM
L4 0 S (METHOD AND ((RADICULAR OR ARVECULAR)(2A)DEFECT#))/CLM
E ARVECULAR
L5 3 S (METHOD AND RADICULAR)/CLM

=> s TGFbeta# or (tgf beta#) or (TRANSFORMING GROWTH FACTOR# beta#);s bmp# or (((bone morphogen?)o
osteogenic)(w)(protein# or polypeptide#))

4 TGFBETA#
1816 TGF
175705 BETA#
1193 TGF BETA#
(TGF(W)BETA#)
29467 TRANSFORMING
143054 GROWTH
428867 FACTOR#
175705 BETA#
746 TRANSFORMING GROWTH FACTOR# BETA#
(TRANSFORMING(W)GROWTH(W)FACTOR#(W)BETA#)
L6 1421 TGFBETA# OR (TGF BETA#) OR (TRANSFORMING GROWTH FACTOR# BET
A#)

701 BMP#
32713 BONE
991 MORPHOGEN?
485 BONE MORPHOGEN?
(BONE(W)MORPHOGEN?)
713 OSTEOGENIC
79575 PROTEIN#
19436 POLYPEPTIDE#
485 ((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR POLYPEPTIDE
#)
L7 870 BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR PO
LYP
EPTIDE#))

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(FILE 'USPAT' ENTERED AT 11:45:02 ON 24 NOV 1998)
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E ARTHROSTEITIS
L2 5 S E3
E RHEUMATI?
L3 834 S (METHOD AND (RHEUMATIC? OR RHEUMATISM? OR RHEUMATOID?))/
CLM
L4 0 S (METHOD AND ((RADICULAR OR ARVECULAR)(2A)DEFECT#))/CLM
E ARVECULAR
L5 3 S (METHOD AND RADICULAR)/CLM
L6 1421 S TGFBETA# OR (TGF BETA#) OR (TRANSFORMING GROWTH FACTOR#
BET
L7 870 S BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR
PO

=> s mp52 or (mp 52)

14 MP52
29793 MP
833705 52
347 MP 52
(MP(W)52)
L8 359 MP52 OR (MP 52)

=> s mp 52

29793 MP
833705 52
L9 347 MP 52
(MP(W)52)

=> s l9 and (l6 or l7)

L10 2 L9 AND (L6 OR L7)

=> d bib ab 1-

US PAT NO: 5,807,713 [IMAGE AVAILABLE] L10: 1 of 2
DATE ISSUED: Sep. 15, 1998
TITLE: DNA encoding growth/differentiation factor
INVENTOR: Gertrud Hotten, Bochum, Federal Republic of Germany
Helge Neidhardt, Marburg, Federal Republic of Germany
Rolf Bechtold, Heidelberg, Federal Republic of Germany
Jens Pohl, Hambrucken, Federal Republic of Germany
ASSIGNEE: Biopharm Gesellschaft zur Biotechnologischen Entwicklung, Heidelberg, Federal Republic of Germany (foreign corp.)
APPL-NO: 08/482,577
DATE FILED: Jun. 7, 1995
ART-UNIT: 182
PRIM-EXMR: John Ulm
ASST-EXMR: Prema Mertz
LEGAL-REP: Nikaido Marmelstein Murray & Oram LLP

US PAT NO: 5,807,713 [IMAGE AVAILABLE] L10: 1 of 2

ABSTRACT:
The invention concerns a protein of the **TGF**-.**beta**. family, the coding therefor and a pharmaceutical composition containing such a protein.

US PAT NO: 5,658,882 [IMAGE AVAILABLE] L10: 2 of 2
DATE ISSUED: Aug. 19, 1997
TITLE: Methods of inducting formation of tendon and/or ligament tissue comprising administering **BMP**-12, **BMP**-13, and/or **MP**-**52**
INVENTOR: Anthony J. Celeste, Hudson, MA

John M. Wozney, Hudson, MA
Vicki A. Rosen, Brookline, MA
Neil M. Wolfman, Dover, MA
Gerald H. Thomsen, Port Jefferson, NY
Douglas A. Melton, Lexington, MA
ASSIGNEE: Genetics Institute, Inc., Cambridge, MA (U.S. corp.)
President and Fellows of Harvard College, Cambridge, MA (U.S. corp.)
APPL-NO: 08/362,670
DATE FILED: Dec. 22, 1994
ART-UNIT: 181
PRIM-EXMR: Vasu S. Jagannathan
ASST-EXMR: Elizabeth C. Kemmerer
LEGAL-REP: Steven R. Lazar, Thomas J. DesRosier

US PAT NO: 5,658,882 [IMAGE AVAILABLE] L10: 2 of 2

ABSTRACT:
The present invention relates to methods for the induction of tendon/ligament-like tissue formation, wound healing and ligament and other tissue repair, using a composition comprising **BMP**-12, **BMP**-13 or **MP**-**52*, or combinations of the above.

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(FILE 'USPAT' ENTERED AT 11:45:02 ON 24 NOV 1998)
L1 489 S (METHOD AND (OSTEOPOROSIS OR OSTEOARTHRITIS OR ARTHROSTE
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E ARTHROSTEITIS
L2 5 S E3
E RHEUMATI?
L3 834 S (METHOD AND (RHEUMATIC? OR RHEUMATISM? OR RHEUMATOID?))/
CLM
L4 0 S (METHOD AND ((RADICULAR OR ARVECULAR)(2A)DEFECT#))/CLM
E ARVECULAR
L5 3 S (METHOD AND RADICULAR)/CLM
L6 1421 S TGFBETA# OR (TGF BETA#) OR (TRANSFORMING GROWTH FACTOR#
BET
L7 870 S BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR
PO
L8 359 S MP52 OR (MP 52)
L9 347 S MP 52
L10 2 S L9 AND (L6 OR L7)

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(FILE 'USPAT' ENTERED AT 11:45:02 ON 24 NOV 1998)
L1 489 S (METHOD AND (OSTEOPOROSIS OR OSTEOARTHRITIS OR ARTHROSTE
ITI
E ARTHROSTEITIS
L2 5 S E3
E RHEUMATI?
L3 834 S (METHOD AND (RHEUMATIC? OR RHEUMATISM? OR RHEUMATOID?))/
CLM
L4 0 S (METHOD AND ((RADICULAR OR ARVECULAR)(2A)DEFECT#))/CLM
E ARVECULAR
L5 3 S (METHOD AND RADICULAR)/CLM
L6 1421 S TGFBETA# OR (TGF BETA#) OR (TRANSFORMING GROWTH FACTOR#
BET
L7 870 S BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR
PO
L8 359 S MP52 OR (MP 52)
L9 347 S MP 52
L10 2 S L9 AND (L6 OR L7)

=> save all a08945459/1

L# LIST 'L1-L10' HAS BEEN SAVED AS 'A08945459/L'

=> d his; log y

(FILE 'USPAT' ENTERED AT 11:45:02 ON 24 NOV 1998)
L1 489 S (METHOD AND (OSTEOPOROSIS OR OSTEOARTHRITIS OR ARTHROSTE
ITI
E ARTHROSTEITIS
L2 5 S E3
E RHEUMATI?
L3 834 S (METHOD AND (RHEUMATIC? OR RHEUMATISM? OR RHEUMATOID?))/
CLM
L4 0 S (METHOD AND ((RADICULAR OR ARVECULAR)(2A)DEFECT#))/CLM
E ARVECULAR
L5 3 S (METHOD AND RADICULAR)/CLM
L6 1421 S TGFBETA# OR (TGF BETA#) OR (TRANSFORMING GROWTH FACTOR#
BET
L7 870 S BMP# OR (((BONE MORPHOGEN?)OR OSTEOGENIC)(W)(PROTEIN# OR
PO
L8 359 S MP52 OR (MP 52)
L9 347 S MP 52
L10 2 S L9 AND (L6 OR L7)
SAVE ALL A08945459/L

U.S. Patent & Trademark Office LOGOFF AT 12:57:46 ON 24 NOV 1998

FILE 'USPAT' ENTERED AT 16:14:00 ON 24 NOV 1998

WELCOME TO THE
U.S. PATENT TEXT FILE

=> s aminopetidase# or (amino petidase#)

4 AMINOPETIDASE#
159099 AMINO
2 PETIDASE#
0 AMINO PETIDASE#
(AMINO(W)PETIDASE#)
L1 4 AMINOPETIDASE# OR (AMINO PETIDASE#)

=> s (di(w)14) or diaminopetidase#

'L4' NOT FOUND

=> s (di(w)11) or diaminopetidase#

148213 DI
0 DI(W)L1
0 DIAMINOPETIDASE#
L2 0 (DI(W)L1) OR DIAMINOPETIDASE#

=> d bib ab kwic 1- 11

US PAT NO: 5,350,692 [IMAGE AVAILABLE] L1: 1 of 4
DATE ISSUED: Sep. 27, 1994
TITLE: Microorganisms useful for hydrogen gas production
INVENTOR: Fumiaki Taguchi, Kanagawa, Japan
Masayoshi Morimoto, Tokyo, Japan
Takeshi Kyoya, Kanagawa, Japan
Mikio Takano, Tokyo, Japan
ASSIGNEE: Kajima Corporation, Tokyo, Japan (foreign corp.)
APPL-NO: 08/091,684
DATE FILED: Jul. 15, 1993
ART-UNIT: 188
PRIM-EXMR: Douglas W. Robinson
ASST-EXMR: Jeffrey J. Seuigny
LEGAL-REP: Browdy and Neimark

US PAT NO: 5,350,692 [IMAGE AVAILABLE] L1: 1 of 4

ABSTRACT:
The present invention relates to a process for preparing hydrogen gas on an industrial scale by culturing the microorganism Clostridium beijerinckii Ferm BP-3592 or the anaerobic asporogenic bacterium strain Ferm BP-3593 in a medium containing glucose and/or a polysaccharide containing a glucose unit.

SUMMARY:

BSUM(36)

N-acetylglucosaminidase
alkaline phosphatase
leucylglycine aminopeptidase
glycine aminopeptidase
proline **aminopetidase**
phenylalanine aminopeptidase
arginine aminopeptidase
serine aminopeptidase
pyrrolidone aminopeptidase. . .

US PAT NO: 5,350,685 [IMAGE AVAILABLE] L1: 2 of 4
DATE ISSUED: Sep. 27, 1994
TITLE: Process for preparing hydrogen gas using microorganism
INVENTOR: Fumiaki Taguchi, Kanagawa, Japan
Masayoshi Morimoto, Tokyo, Japan
Takeshi Kyoya, Kanagawa, Japan
Mikio Takano, Tokyo, Japan
ASSIGNEE: Kajima Corporation, Tokyo, Japan (foreign corp.)
APPL-NO: 08/093,670
DATE FILED: Jul. 20, 1993
ART-UNIT: 188
PRIM-EXMR: Douglas W. Robinson
ASST-EXMR: Jeffrey J. Sevigny
LEGAL-REP: Browdy and Neimark

US PAT NO: 5,350,685 [IMAGE AVAILABLE] L1: 2 of 4

ABSTRACT:
The present invention relates to a process for preparing hydrogen gas on an industrial scale by culturing the microorganism Clostridium beijerinckii Ferm BP-3592 or the anaerobic asporogenic bacterium strain Ferm BP-3593 in a medium containing glucose and/or a polysaccharide containing a glucose unit.

DETDESC:

DETD(15)

N-acetylglucosaminidase
alkaline phosphatase
leucylglycine aminopeptidase
glycine aminopeptidase
proline **aminopetidase**
phenylalanine aminopeptidase
arginine aminopeptidase
serine aminopeptidase
pyrrolidone aminopeptidase. . .

US PAT NO: 5,116,744 [IMAGE AVAILABLE] L1: 3 of 4
DATE ISSUED: May 26, 1992
TITLE: Microbial cyanide converting enzymes, their production and use
INVENTOR: Kjeld Ingvorsen, Vaerloese, Denmark
SVen E. Godtfredsen, Vaerloese, Denmark
Birgitte Hojer-Pedersen, Vaerloese, Denmark
ASSIGNEE: Novo Industri A/S, Bagsvaerd, Denmark (foreign corp.)
APPL-NO: 07/595,684
DATE FILED: Sep. 19, 1990
ART-UNIT: 184
PRIM-EXMR: Charles L. Patterson
LEGAL-REP: Fidelman & Wolffe

US PAT NO: 5,116,744 [IMAGE AVAILABLE] L1: 3 of 4

ABSTRACT:
A novel cyanide converting enzyme, a "cyanidase" is described. The enzyme is extremely efficient in reducing substantial concentrations of cyanide to very low levels in a broad pH, and temperature range, and in the presence of organics and metal ions.

SUMMARY:

BSUM(48)

.mu.m	0.8-2.5	0.8-2.5
Motility	+	+
Flagellation	peritrichous	peritrichous
Gram reaction	-	-
Lysis by 3% KOH	+	+
Aminopetidase (Cerny)	+	+
Spores	-	-
Oxidase	+	+
Catalase	+	+
Growth anaerobic	-	-
37/41.degree. C.	+/-.	. .

US PAT NO: PP 7,024 [IMAGE AVAILABLE] L1: 4 of 4
DATE ISSUED: Sep. 12, 1989
TITLE: Strawberry plant `Commander`
INVENTOR: Harold A. Johnson, Jr., Watsonville, CA
David W. Small, Ventura, CA
Amado Q. Amorao, Watsonville, CA
Joseph I. Espejo, Jr., Watsonville, CA
ASSIGNEE: Driscoll Strawberry Associates, Inc., Watsonville, CA (U.S. corp.)
APPL-NO: 07/220,851
DATE FILED: Jul. 18, 1988
ART-UNIT: 184
PRIM-EXMR: Robert E. Bagwill
LEGAL-REP: Townsend and Townsend

US PAT NO: PP 7,024 [IMAGE AVAILABLE] L1: 4 of 4

ABSTRACT:
A new and distinct spring bearing variety of strawberry plant, characterized by its ability to produce a strong plant, but which remains in production consistently from April to October, if given adequate chilling before and after being planted.
The variety is particularly distinguished by its consistently good flavor, large calyx, large smooth and attractive fruit, and heavy total production. Its long shelf life also becomes a distinctive character. The dark and glossy leaflets are characters that help identify this new variety.

DETDESC:

DETD(11)
Leucyl **aminopetidase** (LAP): 2 Banded=B3*

=> s (cathepsin c)

902 CATHEPSIN
1298559 C
L3 98 (CATHEPSIN C)
(CATHEPSIN(W)C)

=> s (initiator or (amino terminal))(a)methionine

39304 INITIATOR
159099 AMINO
376746 TERMINAL
4916 AMINO TERMINAL
(AMINO(W)TERMINAL)
13503 METHIONINE
L4 611 (INITIATOR OR (AMINO TERMINAL))(A)METHIONINE

=> s l3(p)l4

L5 0 L3(P)L4

=> s (initiator or ((amino or n)(w)termin?))(2a)(methionine or met)

39304 INITIATOR
159099 AMINO
693167 N
754063 TERMIN?
13503 METHIONINE
87697 MET
L6 1529 (INITIATOR OR ((AMINO OR N)(W)TERMIN?))(2A)(METHIONINE OR M
ET)

=> s l3 and l6

L7 14 L3 AND L6

=> s l3(p)l6

L8 3 L3(P)L6

=> d bib ab kwic 1-

US PAT NO: 5,620,685 [IMAGE AVAILABLE] L8: 1 of 3
DATE ISSUED: Apr. 15, 1997
TITLE: Protecting agents from radiation hazards
INVENTOR: Nobusuke Nishi, Maebashi, Japan
Haruhiko Tsumura, Tano-gun, Japan
Hideo Inoue, Takasaki, Japan
ASSIGNEE: Kirin Brewery Company, Limited, Tokyo, Japan (foreign corp.)
APPL-NO: 08/357,125
DATE FILED: Dec. 16, 1994
ART-UNIT: 181
PRIM-EXMR: Howard E. Schain
LEGAL-REP: Foley & Lardner

US PAT NO: 5,620,685 [IMAGE AVAILABLE] L8: 1 of 3

ABSTRACT:
The present invention relates to pharmaceutical composition comprising SCF protein, IL-3 protein, GM-CSF protein and IL-6 protein. More

specifically, the present invention relates to a protecting agent from radiation hazards, comprising SCF protein, IL-3 protein, GM-CSF protein and IL-6 protein.
The present invention also relates to a method for the treatment of patients with radiation hazards, which comprises administering the pharmaceutical composition according in a therapeutically effective amount to the patients.
The present invention has an excellent effect of enabling 100% survival of animals exposed to a lethal dose of radiations, which could not be attained by prior art pharmaceuticals.

DETDESC:

DETD(39)

(1) . . . a characteristic that a human IL-6 protein starting with Ala at the N-terminus can be produced by cleaving off the **N**-**terminal** **Met** Lys sequence of the IL-6 protein with the protease **cathepsin** **C**. Such a treatment, however, was not carried out.

US PAT NO: 5,304,473 [IMAGE AVAILABLE] L8: 2 of 3
DATE ISSUED: Apr. 19, 1994
TITLE: A-C-B proinsulin, method of manufacturing and using same, and intermediates in insulin production
INVENTOR: Rama M. Belagaje, Indianapolis, IN
Richard D. DiMarchi, Carmel, IN
William F. Heath, Jr., Indianapolis, IN
Harlan B. Long, Carmel, IN
ASSIGNEE: Eli Lilly and Company, Indianapolis, IN (U.S. corp.)
APPL-NO: 07/715,183
DATE FILED: Jun. 11, 1991
ART-UNIT: 186
PRIM-EXMR: David L. Lacey
ASST-EXMR: Donald E. Adams
LEGAL-REP: Richard B. Murphy, Leroy Whitaker

US PAT NO: 5,304,473 [IMAGE AVAILABLE] L8: 2 of 3

ABSTRACT:
The instant invention provides novel molecules derived from the components of proinsulin using recombinant DNA technology. The invention provides molecules of the formula A--C--B wherein A is the A-chain of an insulin species, B is the B-chain of an insulin species and C is a connecting peptide. These molecules possess insulin-like activity and are useful for the treatment of diabetes mellitus, particularly non-insulin dependent diabetes mellitus. These molecules are also useful for the production of insulin and constitute a novel pathway for the recombinant production of insulin species. The invention provides a method of making insulin proceeding through the compounds of the invention as intermediates. The instant invention further provides recombinant DNA compounds which encode the compounds of the invention.

DETDESC:

DETD(159)

This . . . in significant savings in the recombinant production of commercially significant quantities of insulin by eliminating the requirement of removing the **N**-**terminal** **methionine** of the recombinant molecule with **cathepsin** **C**, or other methods, relying instead on the intrinsic action of the methionyl amino peptidase of the E. coli host cell to remove the **N**-**terminal** **methionine**.

US PAT NO: 5,264,209 [IMAGE AVAILABLE] L8: 3 of 3
DATE ISSUED: Nov. 23, 1993
TITLE: Modified HIL-6
INVENTOR: Toshifumi Mikayama, Gunma, Japan
Toshihiko Kadoya, Takasaki, Japan
Makoto Kakitani, Maebashi, Japan
Hideo Inoue, Takasaki, Japan
ASSIGNEE: Amgen, Inc., Thousand Oaks, CA (U.S. corp.)
APPL-NO: 07/632,070
DATE FILED: Dec. 21, 1990
ART-UNIT: 184
PRIM-EXMR: Robert A. Wax
ASST-EXMR: Keith C. Furman
LEGAL-REP: Marshall, O'Toole, Gerstein, Murray & Borun

US PAT NO: 5,264,209 [IMAGE AVAILABLE] L8: 3 of 3

ABSTRACT:
Provided are PEGylated "interleukin-6" derivatives (PEG IL-6) having an extended plasma half-life, as well as enhanced in-vivo IL-6 biological activities.
Methods for producing the modified glycosylated and unglycosylated IL-6 proteins or polypeptides, as well as, for their use in treating hematopoietic disorders and difficiencies, particularly acute thrombocytopenia, are also provided.

DETDESC:

DETD(81)

SEQ ID NO. 3 ##STR9## This amino acid sequence has **N**-**terminal** residues of **Met**-Lys-Ala-Pro-and thus can be conveniently converted to Ala-Pro-, the natural hIL-6 sequence, by cleaving off the Met-Lys using **cathepsin** **C**.

=> d detd(39)

US PAT NO: 5,620,685 [IMAGE AVAILABLE] L8: 1 of 3

DETDESC:

DETD(39)

(1) A DNA molecule which encodes the human IL-6 amino acid sequence was chemically synthesized in accordance with the procedure of Souza et al. (JP-A-63-500536) with reference to the published amino acid sequence of human IL-6 protein (Haegeman et al., Eur. J. Biochem., vol. 159, p. 625, 1986), and incorporated into E. coli to express human IL-6 protein in the same manner as described in JP-A-4-218000. The human IL-6 protein produced by expression in the thus prepared recombinant E. coli has a characteristic that a human IL-6 protein starting with Ala at the N-terminus can be produced by cleaving off the **N**-**terminal** **Met** Lys sequence of the IL-6 protein with the protease **cathepsin** **C**. Such a treatment, however, was not carried out.

=> d detd(40)

US PAT NO: 5,620,685 [IMAGE AVAILABLE] L8: 1 of 3

DETDESC:

DETD(40)

(2) Extraction, solubilization and refolding of human IL-6 protein were carried out in accordance with the procedure of JP-A-63-157996.

=> d detd(159) 2

US PAT NO: 5,304,473 [IMAGE AVAILABLE] L8: 2 of 3

DETDESC:

DETD(159)

This novel pathway for the preparation of insulin is distinct from the current practice of replicating natural processes in diverse organisms. This alternate pathway to insulin results in significant savings in the recombinant production of commercially significant quantities of insulin by eliminating the requirement of removing the **N**-**terminal** **methionine** of the recombinant molecule with **cathepsin** **C**, or other methods, relying instead on the intrinsic action of the methionyl amino peptidase of the E. coli host cell to remove the **N**-**terminal** **methionine**.

=> d detd(160) 2

US PAT NO: 5,304,473 [IMAGE AVAILABLE] L8: 2 of 3

DETDESC:

DETD(160)

Since the removal of the N-terminal methionine residue of ACB-PI is dependent on the presence of MAP, the host cell chosen must intrisically produce MAP or have been engineered to produce MAP. The MAP protease is indigenous to E. coli cells. Thus, a variety of E. coli cell lines which are not deficient in the production of the MAP may be employed in the practice of the method of the instant invention. Examples of E. coli host cells useful in the practice of the instant invention include the cell lines E. coli K12 L201, L687, L693, L507, L640, L641, L695, L814 (E. coli B). In the pre erred practice of the invention said E. coli host cell is the E. coli K12 RV308 E. coli cell line.

=> d detd(161) 2

US PAT NO: 5,304,473 [IMAGE AVAILABLE] L8: 2 of 3

DETDESC:

DETD(161)

The conversion of the single-chain ACB-PI molecule to a functional native insulin or insulin analog requires the excision of the interal C-peptide. This may be achieved by enzymatic or chemical means such as cyanogen bromide cleavage. When the native human proinsulin A-chain, B-chain and C-peptide amino acid sequences are employed in the ACB-hPI peptide's construction as exemplified herein, the amino acid sequence of the ACB-hPI peptide is: ##STR3##

=> save all a08945459/1

'A08945459/L' IN USE
REPLACE OLD DEFINITION? Y/(N):n

=> save all b08945459/1

L# LIST 'L1-L8' HAS BEEN SAVED AS 'B08945459/L'

=> d his; log y

(FILE 'USPAT' ENTERED AT 16:14:00 ON 24 NOV 1998)
L1 4 S AMINOPETIDASE# OR (AMINO PETIDASE#)
L2 0 S (DI(W)L1) OR DIAMINOPEPTIDASE#
L3 98 S (CATHEPSIN C)
L4 611 S (INITIATOR OR (AMINO TERMINAL))(A)METHIONINE
L5 0 S L3(P)L4
L6 1529 S (INITIATOR OR ((AMINO OR N)(W)TERMIN?))(2A)(METHIONINE O R M
L7 14 S L3 AND L6
L8 3 S L3(P)L6
SAVE ALL B08945459/L

U.S. Patent & Trademark Office LOGOFF AT 16:31:14 ON 24 NOV 1998

FILE 'USPAT' ENTERED AT 16:36:29 ON 08 DEC 1998

* *
* W E L C O M E T O T H E *
* U.S. P A T E N T T E X T F I L E *
* *

=> s 5658882/pn

L1 1 5658882/PN

=> s l1 and ?dimer

17455 ?DIMER
L2 1 L1 AND ?DIMER

=> d kwic 1-

US PAT NO: **5,658,882** [IMAGE AVAILABLE] L2: 1 of 1

SUMMARY:

BSUM(14)

The . . . set forth in SEQ ID NO:26. In a preferred embodiment, the purified polypeptide may be in the form of a **dimer** comprised of two subunits, each with the amino acid sequence of SEQ ID NO:2.

DETDESC:

DETD(7)

The . . . BMP-12 would start at nucleotide #571 of SEQ ID NO:1. The apparent molecular weight of this species of human BMP-12 **dimer** was determined by SDS-PAGE to be approximately 20-22 kd on a Novex 16% tricine gel. The pI of this molecule. . . be [M]TALA. The pI of this molecule is approximately 7.0. The apparent molecular weight of this species of human BMP-12 **dimer** was determined by SDS-PAGE to be approximately 25-27 kd on a Novex 16% tricine gel. The human BMP-12 protein exists. . .

DETDESC:

DETD(31)

It . . . heteromolecules comprised of different BMP moieties. For example, a method and composition of the invention may comprise a disulfide linked **dimer** comprising a BMP-12 related protein subunit and a subunit from one of the "BMP" proteins described above. Thus, the present invention includes compositions comprising a purified BMP-12 related polypeptide which is a **heterodimer** wherein one subunit comprises the amino acid sequence from amino acid #1 to amino acid #104 of SEQ ID NO:2, . . . consisting of BMP-1, BMP-2, BMP-3, BMP-4, BMP-5, BMP-6, BMP-7, BMP-8, BMP-9, BMP-10 and BMP-11. A further embodiment may comprise a **heterodimer** of disulfide bonded tendon/ligament-like tissue inducing moieties such as BMP-12, VL-1 (BMP-13) or MP52. For example the **heterodimer** may comprise one subunit comprising an amino acid sequence from #1 to #104 of SEQ ID NO:2 and the other. . .

DETDESC:

DETD(75)

It is contemplated therefore that the mature active species of BMP-12 comprises a **homodimer** of two polypeptide subunits, each subunit comprising amino acids #1 to #104 of SEQ ID NO:2 with a predicted molecular. . .

DETDESC:

DETD(118)

It is contemplated therefore that the mature active species of VL-1 comprises a **homodimer** of two polypeptide subunits, each subunit comprising amino acids #1 to #120 of SEQ ID NO:26 with a predicted molecular. . .

DETDESC:

DETD(134)

A . . . glutathione (oxidized); at pH of approximately 8.5). The solution is gently mixed and stored at 23.degree. C. for 1-4 days. **Dimer** formation is assessed by running an aliquot on a Novex 16% tricine gel at 125 volts for 2.5 hours, followed by Coomassie Blue staining and destaining. BMP-12 **dimer** was purified using a C4 analytical RP-HPLC (reversed phase-high performance liquid chromatography) column (Vydac 214TP54) which was equilibrated to 1%. .

=> log y

U.S. Patent & Trademark Office LOGOFF AT 16:39:53 ON 08 DEC 1998

=> e cerletti?/in

E1 5 CERLES B/IN
E2 6 CERLETTI N/IN
E3 0 --> CERLETTI?/IN
E4 1 CERLIANI A/IN
E5 1 CERLING T E/IN
E6 1 CERLYANTS A L/IN
E7 3 CERMAC L/IN
E8 1 CERMAK A/IN
E9 1 CERMAK B/IN
E10 3 CERMAK D/IN
E11 4 CERMAK F/IN
E12 5 CERMAK H/IN

=> s e2

L1 6 "CERLETTI N"/IN

=> d bib 1-6

L1 ANSWER 1 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 96-117000 [12] WPIDS
DNC C96-037103
TI Prodn. of dimeric biologically active transforming growth factor - by refolding denatured monomer in detergent-free folding buffer contg. specific organic solvent to improve yield.
DC B04
IN ***CERLETTI, N***
PA (CIBA) CIBA GEIGY AG; (NOVS) NOVARTIS AG
CYC 66
PI WO 9603433 A1 960208 (9612)* EN 54 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG
W: AM AU BB BG BR BY CA CN CZ EE FI GE HU IS JP KG KP KR KZ LK LR LT LV MD MG MN MX NO NZ PL RO RU SG SI SK TJ TM TT UA US UZ VN
AU 9531096 A 960222 (9621)
ZA 9506139 A 960424 (9622) 48 pp
FI 9700258 A 970122 (9717)
NO 9700326 A 970124 (9717)
EP 779896 A1 970625 (9730) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
HU 76667 T 971028 (9815)

NZ 290374 A 980728 (9836)
KR 97704778 A 970906 (9839)
ADT WO 9603433 A1 WO 95-EP2719 950712; AU 9531096 A AU 95-31096 950712; ZA 9506139 A ZA 95-6139 950724; FI 9700258 A WO 95-EP2719 950712, FI 97-258 970122; NO 9700326 A WO 95-EP2719 950712, NO 97-326 970124; EP 779896 A1 EP 95-926858 950712, WO 95-EP2719 950712; HU 76667 T WO 95-EP2719 950712, HU 97-211 950712; NZ 290374 A NZ 95-290374 950712, WO 95-EP2719 950712; KR 97704778 A WO 95-EP2719 950712, KR 97-700477 970124
FDT AU 9531096 A Based on WO 9603433; EP 779896 A1 Based on WO 9603433; HU 76667 T Based on WO 9603433; NZ 290374 A Based on WO 9603433; KR 97704778 A Based on WO 9603433
PRAI EP 94-810439 940725

L1 ANSWER 2 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 96-116999 [12] WPIDS
DNC C96-037102
TI Prodn. of dimeric, biologically active transforming growth factor beta - by refolding denatured monomer in buffer contg. mild detergent and specific organic solvents to improve yields.
DC B04
IN ***CERLETTI, N***
PA (CIBA) CIBA GEIGY AG; (NOVS) NOVARTIS AG
CYC 66
PI WO 9603432 A1 960208 (9612)* EN 59 pp
RW: AT BE CH DE DK ES FR GB GR IE IT KE LU MC MW NL OA PT SD SE SZ UG
W: AM AU BB BG BR BY CA CN CZ EE FI GE HU IS JP KG KP KR KZ LK LR LT LV MD MG MN MX NO NZ PL RO RU SG SI SK TJ TM TT UA US UZ VN
AU 9531095 A 960222 (9621)
ZA 9506138 A 960424 (9622) 53 pp
FI 9700229 A 970120 (9717)
NO 9700325 A 970306 (9721)
EP 775159 A1 970528 (9726) EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE
HU 76668 T 971028 (9815)
NZ 290373 A 980427 (9823)
AU 690311 B 980423 (9828)
KR 97704777 A 970906 (9839)
ADT WO 9603432 A1 WO 95-EP2718 950712; AU 9531095 A AU 95-31095 950712; ZA 9506138 A ZA 95-6138 950724; FI 9700229 A WO 95-EP2718 950712, FI 97-229 970120; NO 9700325 A WO 95-EP2718 950712, NO 97-325 970124; EP 775159 A1 EP 95-926857 950712, WO 95-EP2718 950712; HU 76668 T WO 95-EP2718 950712, HU 97-210 950712; NZ 290373 A NZ 95-290373 950712, WO 95-EP2718 950712; AU 690311 B AU 95-31095 950712; KR 97704777 A WO 95-EP2718 950712, KR 97-700476 970124
FDT AU 9531095 A Based on WO 9603432; EP 775159 A1 Based on WO 9603432; HU 76668 T Based on WO 9603432; NZ 290373 A Based on WO 9603432; AU 690311 B Previous Publ. AU 9531095, Based on WO 9603432; KR 97704777 A Based on WO 9603432
PRAI EP 94-810438 940725

L1 ANSWER 3 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 93-161126 [20] WPIDS
DNC C93-071116
TI New hybrid transforming growth factor-beta molecules - comprise portions of mature TGF-beta isoforms; useful as wound healants, cardioprotective, antiinflammatory and immunosuppressive agents etc..
DC B04 D16
IN ***CERLETTI, N*** ; COX, D; KUHLA, J; MCMASTER, G K
PA (CIBA) CIBA GEIGY AG
CYC 24
PI EP 542679 A1 930519 (9320)* EN 48 pp
R: AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE
AU 9227383 A 930513 (9326)
NO 9204323 A 930512 (9328)
CA 2082450 A 930512 (9330)
FI 9205086 A 930512 (9332)
ZA 9208647 A 930825 (9339) 68 pp
JP 05306297 A 931119 (9351) 33 pp
TW 240231 A 950211 (9517)
NZ 245047 A 950427 (9522)
ADT EP 542679 A1 EP 92-810845 921103; AU 9227383 A AU 92-27383 921027; NO 9204323 A NO 92-4323 921110; CA 2082450 A CA 92-2082450 921109; FI 9205086 A FI 92-5086 921109; ZA 9208647 A ZA 92-8647 921110; JP 05306297 A JP 92-300806 921111; TW 240231 A TW 92-108838 921105; NZ 245047 A NZ 92-245047 921109
PRAI EP 91-810870 911111

L1 ANSWER 4 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 91-180005 [25] WPIDS
DNC C91-077688
TI Prodn. of Transforming Growth Factor type-beta-like proteins - by subjecting denatured monomeric form to refolding conditions.
DC B04 D16 P35
IN ***CERLETTI, N*** ; COX, D; KENT, G; MEYHACK, B; SCHMITZ, A; MCMASTER, G K
PA (CIBA) CIBA GEIGY AG; (NOVS) NOVARTIS AG; (CIBA) CIBA GEIGY CORP
CYC 22
PI EP 433225 A 910619 (9125)*
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
AU 9067018 A 910613 (9131)
NO 9005264 A 910607 (9132)
CA 2031430 A 910607 (9133)
FI 9005956 A 910607 (9135)
JP 03191791 A 910821 (9140)
ZA 9009762 A 910828 (9140)
PT 96068 A 910930 (9142)
HU 56880 T 911028 (9147)
AU 638075 B 930617 (9331)
US 5650494 A 970722 (9735) 31 pp
NO 301768 B1 971208 (9805)
ADT EP 433225 A EP 90-810922 901127; JP 03191791 A JP 90-330871 901130; ZA 9009762 A ZA 90-9762 901205; AU 638075 B AU 90-67018 901127; US 5650494 A Cont of US 90-621502 901203, Cont of US 92-960309 921013, Cont of US 94-201703 940225, US 95-486057 950607; NO 301768 B1 NO 90-5264 901205
FDT AU 638075 B Previous Publ. AU 9067018; NO 301768 B1 Previous Publ. NO 9005264
PRAI GB 89-27546 891206

L1 ANSWER 5 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 91-038913 [06] WPIDS
DNN N91-030038 DNC C91-016662
TI 160 kD human polypeptide mediator or precursor of inflammation - polyclonal or monoclonal antibodies to polypeptide treat and diagnose chronic inflammation and hodgkins lymphoma.
DC B04 D16 S03
IN BRUGGEN, J; ***CERLETTI, N*** ; DELABIE, J; DEWOLF-PEETERS, C; ODINK, K G; SORG, C; TARCSAY, L; WIESENDANGER, W; BRUEGGEN, J; DE, WOLF-PEETERS C; DEWOLFPEET, C; WIESENDANG, W
PA (CIBA) CIBA GEIGY AG; (CIBA) CIBA GEIGY CORP; (NOVS) NOVARTIS CORP
CYC 21
PI EP 412050 A 910206 (9106)* 47 pp
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
AU 9058095 A 910110 (9109)
CA 2020303 A 910106 (9113)
PT 94575 A 910320 (9114)
JP 03056499 A 910312 (9116)
DD 298948 A5 920319 (9233)
AU 649226 B 940519 (9424)
US 5411882 A 950502 (9523) 38 pp
EP 412050 B1 951220 (9604) EN 64 pp
R: AT BE CH DE DK ES FR GB GR IT LI LU NL SE
DE 69024279 E 960201 (9610)
ES 2081960 T3 960316 (9618)
IE 70519 B 961211 (9705)
US 5821336 A 981013 (9848)
ADT EP 412050 A EP 90-810481 900626; JP 03056499 A JP 90-176488 900705; DD 298948 A5 DD 90-342467 900703; AU 649226 B AU 90-58095 900702; US 5411882 A Cont of US 90-546344 900629, US 91-811893 911220; EP 412050 B1 EP 90-810481 900626; DE 69024279 E DE 90-624279 900626, EP 90-810481 900626; ES 2081960 T3 EP 90-810481 900626; IE 70519 B IE 90-2426 900704; US 5821336 A Cont of US 90-546344 900629, Div ex US 91-811893 911220, Cont of US 94-310025 940921, US 96-714927 960927
FDT AU 649226 B Previous Publ. AU 9058095; DE 69024279 E Based on EP 412050; ES 2081960 T3 Based on EP 412050; US 5821336 A Div ex US 5411882
PRAI GB 89-15414 890705

L1 ANSWER 6 OF 6 WPIDS COPYRIGHT 1998 DERWENT INFORMATION LTD
AN 88-093533 [14] WPIDS
DNN N88-070768 DNC C88-041940
TI Human macrophage migration inhibition factor related peptide - having immune regulating properties for therapeutic use and used for prodn. of antibodies.
DC B04 D16 S03
IN BRUEGGEN, J; ***CERLETTI, N*** ; CLERC, R; ODINK, K; SORG, C; TARCSAY, L; WIESENDANGER, W; BRUGGEN, J; ODINK, K G; WIESENDANG, W
PA (CIBA) CIBA GEIGY AG; (CIBA) CIBA GEIGY CORP; (NOVS) NOVARTIS CORP
CYC 21
PI EP 263072 A 880406 (8814)* EN 72 pp
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
NO 8704159 A 880502 (8823)
ZA 8707417 A 880405 (8826)
FI 8704287 A 880404 (8827)
AU 8779309 A 880519 (8828)
DK 8705177 A 880404 (8830)
JP 63157997 A 880630 (8832)
PT 85849 A 881130 (8905)
NO 9201024 A 880405 (9227)
EP 263072 B1 940323 (9412) EN 117 pp
R: AT BE CH DE ES FR GB GR IT LI LU NL SE
DE 3789413 G 940428 (9418)
ES 2052602 T3 940716 (9430)
US 5350687 A 940927 (9438) 51 pp
JP 09188698 A 970722 (9739) 65 pp
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ADT EP 263072 A EP 87-810561 870928; ZA 8707417 A ZA 87-7417 871002; JP 63157997 A JP 87-248168 871002; NO 9201024 A Div ex NO 87-4159 871002, NO 92-1024 920317; EP 263072 B1 EP 87-810561 870928; DE 3789413 G DE 87-3789413 870928, EP 87-810561 870928; ES 2052602 T3 EP 87-810561 870928; US 5350687 A Cont of US 87-104744 871002, US 90-617485 901121; JP 09188698 A Div ex JP 87-248168 871002, JP 96-338746 871002; US 5702920 A Cont of US 87-104744 871002, Div ex US 90-617485 901121, Div ex US 94-230664 940421, US 95-508142 950727
FDT DE 3789413 G Based on EP 263072; ES 2052602 T3 Based on EP 263072; US 5702920 A Div ex US 5350687
PRAI GB 86-23850 861003; GB 86-28358 861127

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